DOCUMENT RESUME

ED 253 674 CE 040 616

AUTHOR	Hunter, William W.; Stutts, Jane C.
TITLE	Bicycle Law Enforcement Manual.
INSTITUTION	North Carolina Univ., Chapel Hill. Highway Safety Research Center.
SPONS AGENCY	North Carolina State Dept. of Transportation, Raleigh.
PUB DATE	Sep 81
NOTE	449p.
AVAILABLE FROM	University of North Carolina Highway Safety Research Center, CTP, 197A, Chapel Hill, NC 27514 ($14.00).
PUB TYPE	Guides - Non-Classroom Use (055) -- Reference Materials - General (130)
EDRS PRICE	MF01/PC18 Plus Postage.
DESCRIPTORS	*Bicycling; *Community Programs; *Law Enforcement; Laws; Police; Program Descriptions; *Program Design; *Program Development; Reference Materials; *Safety Education; Traffic Safety
IDENTIFIERS	*Bicycles; North Carolina

ABSTRACT

This manual is an attempt to draw together relevant resources and information for localities interested in developing a bicycle law enforcement operation. It is divided into five major sections. Section I explains the need for and importance of bicycle law enforcement. In section II are presented examples of past and current bicycle law enforcement programs. Section III focuses on the key elements of a bicycle law enforcement program that must be addressed in the initial program design. These include legal issues, who should do the enforcing, what to enforce, adjudication, program evaluation, and community support. Section IV deals with the role of the bicycle officer and the many responsibilities of this position. A resources section (section V) provides a list of relevant materials, including several pages of bicycle enforcement references, brief descriptions of two North Carolina organizations that could offer a community the most aid, lists and descriptions of pertinent films, and a set of educational references which provides a sample of available materials. Throughout the manual, extensive attachments are included to give the user examples from which to draw. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED253674

Bicycle Law Enforcement Manual

William W. Hunter
Jane C. Stutts

UNC HSRC
UNIVERSITY OF NORTH CAROLINA
HIGHWAY SAFETY RESEARCH CENTER

N.C. Department of Transportation
Bicycle Program

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

September, 1981

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B Boone

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TO THE USER OF THIS MANUAL,

The decision to undertake a program of bicycle law enforcement is not easy. There are many elements to be considered, not the least of which is the effort needed to convince the community of the merits of the program. This manual is an attempt to draw together relevant resources and information for a locality interested in developing a bicycle law enforcement operation.

The manual is divided into five major sections:

- The Need.
- Example Programs.
- Program Elements.
- Bicycle Officer Role.
- Resources.

The first section title is self-explanatory and the text attempts to explain why bicycle law enforcement is important. The Example Programs section contains a review of efforts from many different sites. The intent is to give the reader a feel for the wide ranging activity from both past and current programs.

The Program Elements section is further subdivided into what are considered to be the key components of any enforcement undertaking, namely: (1) legal issues, (2) who enforces, (3) what to enforce, (4) adjudication, (5) program evaluation, and (6) community support. This is followed by a section devoted to the Role of the Bicycle Officer and the many responsibilities of this position. The Resources section is meant to provide a list of relevant materials, including several pages of bicycle enforcement references, brief descriptions of the two North Carolina organizations that could offer a community the most aid, lists and descriptions of pertinent films, and finally a set of educational references that can augment the enforcement process.

Throughout the report, extensive attachments have been included to give the user many examples from which to draw, and the folder format readily lends itself to the addition of others. Also, names and addresses of persons engaged in bicycle enforcement activities across the U.S. have been included so that the user can follow up on programs of particular interest.

We commend you for your efforts to promote safe bicycling.

WWH
JCS

TABLE OF CONTENTS

Page

SECTION I. THE NEED FOR BICYCLE LAW ENFORCEMENT I-1

- Background I-1
- The Goal of Bicycle Law Enforcement I-3
- What Research Tells Us I-4
- N.C. Bicycle Accident Facts 1-7
- Summary I-15
- References I-15
  - Attachment A: N.C. Accident Report Form

SECTION II. EXAMPLES OF PAST AND CURRENT BICYCLE LAW ENFORCEMENT PROGRAMS II-1

- Attachment A: Program Descriptions II-A-1

SECTION III. PROGRAM ELEMENTS III-1

- Legal Issues III-3
  - Attachment A: Article by John English
  - Attachment B: BMA Model Bicycle Ordinance
  - Attachment C: Bicycle Section of Uniform Vehicle Code
  - Attachment D: Wisconsin Bicycle Ordinance
  - Attachment E: Examples of City Ordinances
  - Attachment F: Model Regulations Developed for NHTSA
- Who Should Enforce? III-6
  - Attachment A: Minnesota Guidelines for Enforcement Planning
  - Attachment B: Minnesota Guidelines on Patrol Responsibilities
  - Attachment C: Minnesota Bike Patrol Training Workshop Outline
  - Attachment D: Minnesota Workshop Announcement on Training Patrols
- What to Enforce III-12
  - Attachment A: Accident Types Identified in Cross Study
  - Attachment B: Summary of Prominent Accident Types
  - Attachment C: "More Bicycles More Accidents" Pamphlet
  - Attachment D: Minnesota Enforcement Guidelines
  - Attachment E: Wisconsin Enforcement Guidelines
- Adjudication III-18
  - Attachment A: Santa Barbara Adult Violator Class
  - Attachment B: Example Violation Notices
  - Attachment C: Sample Follow-up Letters
  - Attachment D: Hastings, Minnesota Safety Seminar
  - Attachment E: Wisconsin Safety School
  - Attachment F: Dallas Peer Court
  - Attachment G: Concord Peer Court
  - Attachment H: Minnesota Guidelines on Courts

TABLE OF CONTENTS (Con't)

Page

Program Evaluation III-26
    Attachment A: Bicycle Usage Calculations
    Attachment B: Example Record Keeping Forms

Community Support III-36
    Attachment A: Minnesota Guidelines on Community Organizations

SECTION IV. ROLE OF THE BICYCLE OFFICER IV-1

Overall Program Design and Implementation IV-1
Personnel Alternatives IV-1
Police and/or Student Patrol Motivation and Training IV-2
Record Keeping and Program Evaluation IV-3
    Attachment A: BF Interview with Two Bicycle Officers
    Attachment B: "Do-It-Yourself Program Exam"
    Attachment C: Santa Barbara Enforcement Survey

SECTION V. RESOURCES V-1

References V-1

Organizations V-5
    N.C. DOT Bicycle Program V-7
    UNC Highway Safety Research Center V-11

Films V-15
    Films from N.C. DOT Bicycle Program V-15
    Other Film Reviews V-21

Education V-27
    Attachment A: ProBike 80 Education Workshop Summaries
    Attachment B: John Williams' Bicycle Safety Pamphlet
    Attachment C: On-Road Training in Montana
    Attachment D: MBA Comprehensive Bicyclist Education Program
    Attachment E: John Forrester's Effective Cycling Course
    Attachment F: NHTSA's Course for Fourth Graders
    Attachment G: Milner-Fenwick Training Series

ACKNOWLEDGMENTS

Many people contributed time and materials to this project, including state bicycle coordinators, bicycle program administrators, police officers, program evaluators, federal personnel in the United States Department of Transportation, personnel associated with private bicycle organizations, individuals working in Governor's Highway Safety Program offices, university and private researchers, and many others. We are grateful for their contributions.

Special thanks to: Curtis Yates, Katie Moran and Sherri Wagner for their review of the text and general guiding comments ; HSRC media specialist Nine Brinkhous for the graphic layouts; and HSRC typists Teresa Parks, Peggy James, and Judy Hall.

I. THE NEED FOR BICYCLE LAW ENFORCEMENT

Background[1]

There are all kinds of reasons why a police officer doesn't like to give a child a traffic ticket... it doesn't look good to the passing public... why don't you pick on someone your own size?... don't you have something better to do?... The police officer remembers his freedom as a child operating his own bicycle...

The whole concept tends to go against the grain, and it is indeed rare that anyone ever encounters the scene of a police officer stopping a bicyclist and discussing the violation just committed. And yet children are still taught that police officers are their friends and a source of help. Can the child understand that when you stop him you really are trying to help?

The many reasons why police don't like to stop children on bicycles usually lead to situations like the following. The officer is patrolling in a squad car and comes upon a bicyclist riding against the flow of traffic -- since no accident is impending, the officer just rides on by... The officer sees a bicyclist make an improper left turn into a side street -- yet since the maneuver ended safely, the officer just rides on by... A bicyclist completely ignores a stop sign, but the officer rides on by...

But things are not the same as they used to be. There are fewer quiet streets on which to ride a bike, which leaves less room for bicyclist error. And yet bicyclists still violate the law, primarily because both the public and the police permit it.

One end result is the accident scene and all of the accompanying stress...a child injured or perhaps killed...a motorist overcome with grief...horrified onlookers... And the investigation is completed and an accident report filed with the probable cause being bicyclist error. Why do we let this continue?

Communities that analyze their accident data tend to reach some similar conclusions, including:

- *Bicycle accidents and injuries are increasing faster than motor vehicle accidents and injuries.*

---

[1] The background section is adapted from a Santa Barbara, California training film used to motivate police officers faced with the responsibility of bicycle law enforcement. The film is entitled Ride On By.

- Bicycle accident types are predictable.
- In bicycle/motor vehicle accidents, the bicyclist tends to be at fault almost two-thirds of the time.
- Children under 14 are heavily overrepresented in the bicycle/motor vehicle crashes.

The bottom line here has several components. If you're a police officer who happened to investigate some bicycle accidents last year, chances are you will encounter even more this year. And when you look for contributing factors, you will no doubt find that bicyclists have more than their share. This will be the case as long as the public and police allow it to continue. The time has come to change our way of thinking and to begin actively enforcing traffic laws for bicyclists. The purpose of this manual is to lay the groundwork for such a program.

The Goal of Bicycle Law Enforcement

Past efforts to reduce the number of bicycle accidents have focused primarily on: (1) educating young cyclists in the schools or at specially organized bicycle rodeos regarding safe riding practices, and (2) engineering bikeways and other special facilities to physically separate bicyclists from the traffic stream. There is a third area, however, that is receiving increased attention nationwide, and that is the area of bicycle law enforcement.

Experience has shown that bicycle law enforcement can greatly augment the effectiveness of bicycle safety education. The two go hand-in-hand, with enforcement providing the needed "backbone" to prompt bicyclists to put into practice the safe riding skills they have been taught. Simply educating a youngster to the proper way to ride his bicycle in traffic is not going to have much impact if that youngster decides he "can't be bothered" with giving hand signals or coming to a stop at an intersection. Similarly, "Officer Friendly's" instruction to always ride on the right side of the road with traffic may not produce the intended behavior if parents are still teaching their children to ride facing traffic, or if the other patrol officers do not know or care enough to positively reinforce "Officer Friendly's" instruction.

A recent issue of Bicycle Forum magazine (1) lists the following six goals for bicycle law enforcement:

1. To achieve voluntary compliance with the law.
2. To identify and correct repeat violators.
3. To provide uniform enforcement of the laws.
4. To incorporate bicycle safety into school programs.
5. To involve parents in educating their children in safe cycling.
6. To teach riders the vehicle laws.

Clearly the focus of any bicycle enforcement program should be educational and not punitive. A successful enforcement program is one that is able to improve cyclists' knowledge and attitudes and, most importantly, their behaviors. A good program also educates the motoring public concerning their rights and responsibilities when sharing the road with bicyclists.

The purpose of this manual is to provide the needed resources and information to local law enforcement agencies wanting to implement a program of bicycle law enforcement. The manual has been specifically prepared for communities in North Carolina, but its contents should prove useful to any community wanting to benefit from others' experiences and implement an effective bicycle enforcement program.

At the outset, it should be emphasized that there is no single approach to bicycle law enforcement. Each community must carefully evaluate its own needs and design a program that will work for it. For example, some communities have found that the task of issuing citations or warnings to errant bicyclists can effectively be handled by college students or other young adults hired to serve on a special "bike patrol." Other communities feel that regular police officers can best perform this task. As another example, some communities have established special "peer courts" to hear and process juvenile bicycle violators, while others have set up bicycle safety schools or simply mailed letters soliciting parental cooperation and support.

Examples of successful law enforcement programs and descriptions of the key ingredients to these programs are found in Section II of this manual. The remainder of this section summarizes what research tells us about the bicycle/motor vehicle accident problem and presents further evidence supporting the need for bicycle law enforcement. Also included are some statistics on bicycle accidents in North Carolina.

What Research Tells Us

North Carolina Data

In order to effectively deal with the bicycle/motor vehicle accident problem one must first have some understanding of the sorts of accidents occurring, the factors contributing to these accidents, and specific failures on the part of the bicyclist or the motorist. Unfortunately, information of this sort is not readily available from most traffic accident reports. The North Carolina Accident Report Form (see Attachment A) typically does not contain complete information on the bicycle (e.g., bicycle maneuver, point of contact), and particularly for juveniles there is an apparent reluctance by officers to cite bicyclists for a violation or to charge them in an accident.[1] Also, in North

---

[1] In fact, instructions for completing this portion of the North Carolina Accident Report Form state that "Only actions by motor [emphasis added] vehicle drivers which violate rules of the road are to be considered."

Carolina collisions between bicycles and motor vehicles are typed by DMV as "collision of motor vehicle with bicycle," so that further accident type information (e.g., left turn, angle, head-on) is not routinely available.

An attempt was made to overcome some of these difficulties in a 1978 analysis of N.C. bicycle accident data for the three-year period 1974-1976 (7). As one part of this analysis the accident narratives of 853 bicycle-related accidents reported during 1976 were examined in order to evaluate the usefulness of the police officer's accident description as a source of enriched bicycle data. It was found that the narratives were typically so brief that little additional information was revealed. The narratives did, however, provide bicycle maneuver and accident type information for about three-fourths of the cases, and some bicyclist violation information in two-thirds of the cases.

In half of the bicycle accidents examined the bicycle was either entering the roadway from the side (from a driveway, alley, or from between parked vehicles) or going straight ahead. The next most frequent maneuvers were crossing at an intersection (21%) and turning into the path of a motor vehicle traveling on the same roadway (18%). Accident type information is reproduced in Table 1 below. The majority of the bicycle accidents involved angle collisions, while one-fourth were sideswipe crashes.

Table 1. Bicycle accident type (from analysis of 1976 North Carolina narrative data).

Accident Type	Number	Percent[1]
Rear end	32	5.1
Left turn	35	5.6
Right turn	10	1.6
Head-on	5	0.8
Sideswipe	145	23.3
Angle	321	51.5
Single-bicycle	30	4.8
Other	45	7.2
Total, excluding "unknowns"	623	99.9
Unknowns	230	
Total, including "unknowns"	853	

[1] Percent of total, excluding "unknowns."

Where bicyclist violation information was available, failure to yield to oncoming traffic (including "unsafe crossing") was cited in almost half (46%) of the accidents, sign and signal violations in almost 10% of the cases, and riding facing traffic in about 7%. The fact that "no violation" was noted for only 17% of the bicyclists suggests that cyclists are prime contributors to accidents with motor vehicles, a finding that has been validated by research studies in other parts of the country.

Unfortunately, only a third of the narratives examined contained any information pertaining to factors that may have contributed to the accident. Those factors that were cited included failure of the motor vehicle driver to see the bicyclist (17%), failure of the bicyclist to see the motor vehicle (9%), other vehicle traffic (10%), and environmental factors such as trees, hills or curves in the road, sun glare, etc. (9%).

National Data

In a landmark study conducted by Cross and Fisher at Anacapa Sciences, Inc., for the National Highway Traffic Safety Administration (3), in-depth investigations were carried out on 166 fatal and 753 non-fatal bicycle/motor vehicle accidents occurring in four representative areas of the country. Trained field investigators utilized data from police accident report forms, on-site investigations, and witness and vehicle operator interviews to identify the basic types of bicycle/motor vehicle accidents and their causative factors. There were six major classes of bicycle/motor vehicle accidents subdivided into 24 "problem types," which together accounted for 86% of the fatal accidents and 89% of the non-fatal accidents investigated. These accident classes and their significance to law enforcement personnel are discussed in greater detail in a later section of this manual dealing with selective enforcement strategies.

Another important finding from the Cross and Fisher study for law enforcement personnel is that in well over 60% of the accidents investigated, the specific cause of the accident was judged to be bicyclist behavior. Furthermore, in 90% of these cases the bicyclist violated a law that he had full knowledge of. Apparently, simply knowing the rules for safe riding was not sufficient for producing correct riding behaviors. Thus the contention that the most effective bicycle safety programs incorporate both education and enforcement.

North Carolina Bicycle Accident Facts

Each year in North Carolina over 1,100 bicyclists are killed or injured in traffic collisions. North Carolina traffic accident reports for 1980 recorded 30 bicyclists killed in collisions with motor vehicles. There were 24 bicyclist fatalities in 1979, and 31 in 1978. Over a fourth of the bicyclists involved in N.C. traffic accidents receive serious (A-level) injuries, and an additional 45% receive injuries of moderate (B-level) severity. Table 2 presents information on the number of bicyclists killed and injured in N.C. traffic accidents over the past decade, as reported to the Division of Motor Vehicles (4). Numerous studies indicate that many accidents (generally less severe) are not reported to records agencies so that the figures given here represent the "lower bound" of the bicycle accident problem.

Table 2. Bicyclists killed and injured in N.C. traffic accidents: 1970-1980.

Year	Total Bicyclists Killed	Total Bicyclists Injured
1970	30	738
1971	28	698
1972	32	786
1973	25	979
1974	34	1,288
1975	32	1,130
1976	31	937
1977	22	1,063
1978	31	1,065
1979	24	1,058
1980	30	1,108

Most of those injured and killed in bicycle accidents are young persons under 20 years of age. In 1980, children under 15 accounted for over half the bicyclists involved in accidents, and those between the ages of 15 and 19 an additional 21% (Table 3). Once involved in a crash, these young riders are also more likely to be killed or seriously injured than their older counterparts.

Table 3. Bicyclists involved in N.C. traffic accidents by age: 1980.

	Age				
Injury Level	15 and Under	16-19	20-29	30 and Over	Total
Fatal	21 (3.5%)[1]	2 (0.8%)	4 (1.9%)	3 (2.8%)	30 (2.6%)
Serious	172 (28.4%)	56 (22.4%)	60 (28.8%)	32 (30.2%)	320 (27.4%)
Moderate	267 (44.1%)	122 (48.8%)	95 (45.7%)	42 (39.6%)	526 (45.0%)
Minor or None	146 (24.1%)	70 (28.0%)	49 (23.6%)	29 (27.4%)	294 (25.1%)
Total	606 (51.8%)[2]	250 (21.4%)	208 (17.8%)	106 (9.1%)	1170

[1] Column percent
[2] Row percent

As more and more adults take to cycling as a way of both staying fit and conserving gasoline, the age distribution for bicyclists involved in accidents may shift upwards. This is especially true since adults are more likely to ride on the more heavily trafficked downtown business streets and connectors. Still, at least for now, the bicycle accident problem in North Carolina seems focused on young bicyclists, and it is this group which would benefit most from increased education and enforcement.

As a final table in this section on accident facts, Table 4 shows the number of bicycles reported in traffic accidents during 1980 in each city and county in the state. As might be expected, the greatest concentration of bicycle accidents are in the larger urban areas. In Charlotte there were 94 reported accidents, Greensboro 76, Winston-Salem 60, Wilmington 52 and Durham 49. Other cities having a fairly large number of accidents are Chapel Hill (28), Greenville (27), Asheville (26), Rocky Mount (23), Wilson (23) and Fayetteville (18, with an additional 37 in surrounding Cumberland County).

Table 4. Bicycles involved in traffic accidents in North Carolina during 1980.

	Bicycles in Accidents		
County/City	Fatal	Non-Fatal[1]	Total
Alamance	1	3	4
Burlington	0	12	12
Graham	0	4	4
Alexander	1	0	1
Anson	1	2	3
Peachland	0	1	1
Polkton	0	1	1
Wadesboro	0	2	2
Avery	0	1	1
Beaufort	0	2	2
Belhaven	0	1	1
Washington	0	3	3
Bertie	0	3	3
Bladen	0	4	4
Bladenboro	0	2	2
Elizabethtown	0	1	1
Brunswick	0	4	4
Buncombe	0	4	4
Asheville	0	26	26
Burke	0	4	4
Morgantown	0	3	3
Cabarrus	0	12	12
Concord	0	6	6
Kannapolis	0	6	6
Caldwell	0	2	2
Lenoir	0	3	3
Carteret	0	6	6
Beaufort	0	2	2
Morehead City	0	1	1
Newport	0	1	1
Caswell	1	3	4
Catawba	1	11	12
Hickory	0	5	5
Maiden	0	1	1
Newton	0	1	1

---

[1] Includes unknown injury.

Bicycles in Accidents

County/City	Fatal	Non-Fatal	Total
Chatham	0	1	1
Siler City	0	1	1
Cherokee	0	1	1
Chowan	1	0	1
Edenton	0	2	2
Cleveland	0	4	4
Shelby	0	8	8
Columbus	0	2	2
Whiteville	0	6	6
Craven	0	5	5
Havelock	0	2	2
New Bern	0	9	9
Cumberland	0	37	37
Fayetteville	0	18	18
Hope Mills	0	1	1
Spring Lake	0	1	1
Currituck	0	3	3
Dare	0	2	2
Manteo	0	1	1
Nags Head	0	1	1
Davidson	0	12	12
Denton	0	1	1
Lexington	0	7	7
Thomasville	0	6	6
Davie	0	2	2
Mocksville	0	1	1
Duplin	0	3	3
Wallace	0	1	1
Warsaw	1	2	3
Durham	0	6	6
Durham	0	49	49
Pinetops	0	1	1
Rocky Mount	0	23	23
Tarboro	0	1	1
Forsyth	0	10	10
Kernersville	0	1	1
Winston-Salem	0	60	60
Gaston	1	7	8
Belmont	0	2	2
Bessemer City	0	1	1
Cramerton	0	1	1
Gastonia	0	22	22
Lowell	0	1	1
Mt. Holly	0	1	1

Bicycles in Accidents

County/City	Fatal	Non-Fatal	Total
Gates	0	2	2
Granville	0	3	3
Butner	0	1	1
Oxford	0	1	1
Greene	0	2	2
Guilford	0	9	9
Greensboro	1	75	76
High Point	1	20	21
Jamestown	0	1	1
Halifax	0	3	3
Enfield	0	4	4
Roanoke Rapids	0	7	7
Scotland Neck	0	3	3
Harnett	0	3	3
Dunn	0	3	3
Hazelwood	0	2	2
Henderson	0	4	4
Hertford	1	2	3
Murfreesboro	0	2	2
Hoke	0	4	4
Raeford	0	1	1
Hyde	0	1	1
Iredell	0	7	7
Mooresville	0	2	2
Statesville	0	6	6
Jackson	0	2	2
Dillsboro	0	1	1
Johnston	1	0	1
Selma	0	1	1
Smithfield	1	2	3
Jones	0	2	2
Lee	1	1	2
Sanford	0	1	1
Lenoir	0	6	6
Kinston	0	18	18
Lincoln	1	2	3
Macon	0	2	2
Martin	0	2	2
Williamston	0	4	4
McDowell	0	2	2

Bicycles in Accidents

County/City	Fatal	Non-Fatal	Total
Mecklenburg	0	11	11
Charlotte	0	94	94
Mint Hill	0	1	1
Mitchell	0	1	1
Montgomery	0	1	1
Biscoe	0	1	1
Mt. Gilead	0	1	1
Star	0	1	1
Moore	0	2	2
Aberdeen	0	1	1
Pinehurst	0	1	1
Southern Pines	0	2	2
Nash	1	10	11
New Hanover	1	14	15
Carolina Beach	0	1	1
Kure Beach	0	1	1
Wilmington	0	52	52
Wrightsville Beach	0	2	2
Northampton	0	1	1
Onslow	1	10	11
Jacksonville	0	10	10
Orange	0	2	2
Carrboro	0	1	1
Chapel Hill	0	28	28
Hillsborough	0	2	2
Pasquotank	0	2	2
Elizabeth City	0	11	11
Pender	1	2	3
Burgaw	0	1	1
Surf City	0	1	1
Hertford	0	1	1
Winfall	0	1	1
Pitt	2	7	9
Ayden	0	2	2
Farmville	0	1	1
Greenville	0	27	27
Polk	0	1	1
Randolph	0	7	7
Archdale	0	1	1
Asheboro	0	3	3
Randleman	0	1	1

Bicycles in Accidents

County/City	Fatal	Non-Fatal	Total
Richmond	1	4	5
Rockingham	0	2	2
Robeson	0	15	15
Lumberton	1	6	7
Pembroke	0	1	1
Red Springs	0	1	1
Rockingham	0	7	7
Eden	0	3	3
Reidsville	0	8	8
Rowan	2	8	10
China Grove	0	1	1
Salisbury	0	1	1
Rutherford	0	3	3
Forest City	0	3	3
Spindale	1	1	2
Sampson	3	9	12
Clinton	0	2	2
Scotland	0	2	2
Laurinburg	0	6	6
Stanly	0	2	2
Albemarle	0	5	5
Richfield	0	1	1
Stokes	0	2	2
Surry	0	8	8
Mt. Airy	0	2	2
Brevard	0	2	2
Union	1	6	7
Monroe	0	9	9
Vance	0	4	4
Henderson	0	9	9
Wake	0	19	19
Cary	0	6	6
Fuquay-Varina	0	1	1
Garner	0	2	2
Raleigh	0	55	55
Warren	0	1	1
Washington	0	1	1
Boone	0	1	1
Wayne	0	7	7
Fremont	0	1	1
Goldsboro	0	21	21
Mt. Olive	0	4	4

Bicycles in Accidents

County/City	Fatal	Non-Fatal	Total
Wilkes	0	4	4
North Wilkesboro	0	1	1
Wilkesboro	0	1	1
Wilson	0	5	5
Lucama	0	1	1
Stantonsburg	0	1	1
Wilson	0	23	23
Yadkin	0	2	2
Yadkinville	0	2	2

Summary

Accident data such as presented in this chapter vividly illustrate the need for bicycle law enforcement and can be used to motivate law enforcement officers to actively enforce road rules for bicyclists. Motivation can also come from simply driving about the community and observing bicyclists' behavior. One usually does not have to look far before seeing a bicyclist (or motorist) engaged in some careless or irresponsible behavior that puts him at increased risk of accident. In addition to law enforcement officers, community officials, townspeople and (perhaps most importantly) the bicyclists themselves need to be made aware of the need for active bicycle law enforcement and the benefits to be derived from such a program. (See also the section on Community Support.)

Recognizing the need for bicycle law enforcement and convincing others of this need are important first steps toward implementing an effective enforcement program. From this point there are several steps which should be followed, including a review of past and current enforcement programs, a more thorough evaluation of one's own community bicycle safety needs, reviewing and possibly modifying local ordinances, devising an enforcement plan (including a method for program evaluation), soliciting community support, and defining the role of the bicycle officer. The next section is devoted to a presentation of approaches and materials in each of these areas, beginning with a review of past and current bicycle law enforcement programs.

References

1. Baldwin, L. Enforcement: Programs and Problems in Four Communities. Bicycle Forum, No. 4, Fall 1979, pp. 20-25.

2. Hunter, W.W., Cole, D.G. and Leggett, E.C. An Analysis of Bicycle Accidents in North Carolina. Chapel Hill: University of North Carolina Highway Safety Research Center, October 1978.

3. Cross, K.D. and Fisher, G. A Study of Bicycle/Motor Vehicle Accidents: Identification of Problem Types and Countermeasure Approaches. Volume I. Washington, D.C.: National Highway Traffic Safety Administration, September 1977. (Contract No. DOT-HS-4-00982, Ref. PB 282 280).

4. North Carolina Department of Transportation. North Carolina Traffic Accident Facts, 1980. Raleigh: North Carolina Division of Motor Vehicles, 1981.

THE NEED FOR BICYCLE ENFORCEMENT

ATTACHMENT A

NORTH CAROLINA ACCIDENT REPORT FORM

BEST COPY AVAILABLE

DMV-349 (Rev. 1/79)

TRAFFIC ACCIDENT REPORT – Send To: N. C. Division of Motor Vehicles
Raleigh, N. C. 27697

MARKS > < ADDED BY ______ (Initial)

LOCATION

Date: ______ 19___ Month Day Year Day of Week: ______ Time: __ __ __ __ (24 Hour Clock)

Accident Occurred in ______ County ☐ In ☐ Near Incorporated City or Town of ______

Outside City or Town ______ Miles ☐ ☐ ☐ ☐ N E S W of City or Town Limits

On ______
Hwy. No. (I., U.S., N.C., R.P., R.U.). If within corporate limit or no hwy. no., identify by street name. If ramp or service road, indicate on line.

RR. Crossing No.: ______

—.— — — Miles ______ Feet (0 ft. if intersec.) ☐ ☐ ☐ ☐ N E S W At or from ______ Use Hwy. No., Street Name, or Adjacent County or State Line Toward ______ Use Hwy. No., Street Name, Incorporated Town, or Adjacent County or State Line

Local Use

Patrol Area

Do not write in these spaces
DMV Report No.:

Date Received by DMV:

ACCIDENT SEQUENCE

1. VEHICLE MANEUVER/ PEDESTRIAN ACTION		2. ACCIDENT TYPE			3. OBJECT STRUCK AND 4. DISTANCE			
		FIRST HARMFUL EVENT	MOST HARMFUL EVENT: Repeat code if same as for FIRST HARMFUL EVENT		Vehicle 1		Vehicle 2	
Veh. 1	Veh. 2 or Ped.		Veh. 1	Veh. 2 or Ped.	Object	Distance	Object	Distance

No of Units Involved ☐

VEHICLE NO. 1

Driver: ______ First Middle Last Name
Address: ______
City: ______ State: ______ Zip Code: ______
Same Address as on Driver's License? Yes ☐ No ☐ Driver's Phone No.: ______
Race/Sex: ______ Driver's Lic.: ______ State: ______
Date of Birth: ______ Month Day Year Specify Restriction: ______
Veh. Year: ______ Veh. Make: ______ Veh. Type: ______ Trailer Type: ______
Lic. Plate No.: ______ State: ______ Year: ______
VIN: ______
Owner: ______
Address: ______
City: ______ State: ______ Zip Code: ______
TAD (Parts Damaged): ______ Estimated Damage: $ ______
Vehicle Drivable? ☐ Yes ☐ No
Removed to: ______
Address: ______
By: ______ Authority: ______

☐ **VEHICLE NO. 2** ☐ **PEDESTRIAN** ☐ **OTHER**

Driver: ______ First Middle Last Name
Address: ______
City: ______ State: ______ Zip Code: ______
Same Address as on Driver's License? Yes ☐ No ☐ Driver's Phone No.: ______
Race/Sex: ______ Driver's Lic.: ______ State: ______
Date of Birth: ______ Month Day Year Specify Restriction: ______
Veh. Year: ______ Veh. Make: ______ Veh. Type: ______ Trailer Type: ______
Lic. Plate No.: ______ State: ______ Year: ______
VIN: ______
Owner: ______
Address: ______
City: ______ State: ______ Zip Code: ______
TAD (Parts Damaged): ______ Estimated Damage: $ ______
Vehicle Drivable? ☐ Yes ☐ No
Removed to: ______
Address: ______
By: ______ Authority: ______

Other Property Damaged: ______

Estimated Damage: $ ______

Owner Name: ______
Address: ______

INJURY SECTION INSTRUCTIONS: Give Injury Class, Belt Usage, Race/Sex and Age of all Occupants in the space corresponding to the seat occupied (see codes at bottom). Names and addresses are necessary for persons who were injured.

Seat	Inj. Cl.	Belt Use	Race Sex	Age	Injured Names and Addresses First Name Last Name
Left Front					DRIVER 1
Center Front					
Right Front					
Left Rear					
Center Rear					
Right Rear					

Total No. Occupants: ______ Total No. Injured: ______

Seat	Inj. Cl.	Belt Use	Race Sex	Age	Injured Names and Addresses First Name Last Name
Left Front					DRIVER 2, PEDESTRIAN, OTHER
Center Front					
Right Front					
Left Rear					
Center Rear					
Right Rear					

Total No. Occupants: ______ Total No. Injured: ______

Ambulance Requested? ☐ Yes ☐ No If Yes, Ambulance Arrived At: __ __ __ __ (24 Hour Clock)

Injured Taken To: ______ (Treatment Facility and City or Town)

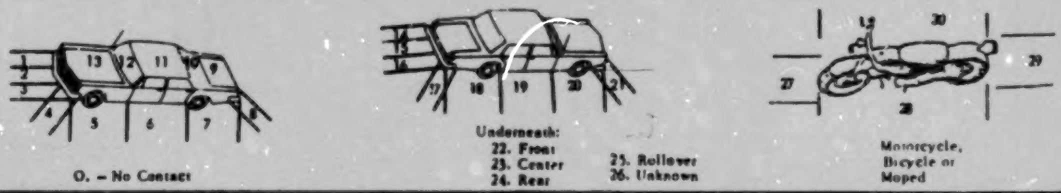
Injury Class

- K – Killed
- A – Incapacitating (Injury obviously serious enough to prevent carrying on normal activities for at least 24 hours; e.g., massive loss of blood, broken bone)
- B – Nonincapacitating (injury other than K or A evident at the scene)
- C – No visible sign of injury but complaint of pain or momentary unconsciousness
- O – No injury

Belt Use

1. None or not used
2. Lap only
3. Lap and shoulder
4. Child restraint system
9. Unable to determine

POINT(S) OF INITIAL CONTACT Write in Codes	
VEH. 1	VEH. 2



O. – No Contact

Underneath:
22. Front
23. Center
24. Rear

25. Rollover
26. Unknown

Motorcycle, Bicycle or Moped

ROADWAY INFORMATION			
1. Locality		8. Road Surface	
2. Development Type		9. Road Defects	
3. Road Feature		10. Road Condition	
4. Road Character		11. Light Condition	
5. Road Class		12. Weather	
6. Number of Lanes		13. Traffic Control Operating Visible ☐ Yes ☐ No ☐ Yes ☐ No	
7. Road Configuration			

	DRIVER 1	DRIVER 2 OR PED.
14. Vision Obstruction		
15. Physical Condition		
16. Intoxication		
17. Chemical Test Given	☐ Yes ☐ No ☐ Refused	☐ Yes ☐ No ☐ Refused

	VEH. 1	VEH. 2
18. Vehicle Defects		
19. Speed Limit (for each vehicle)		
20. Estimated Original Traveling Speed		
21. Estimated Speed at Impact		
22. Tire Impressions Before Impact (ft.)		
23. Distance Traveled After Impact (ft.)		

INDICATE NORTH

Vehicle 1 was Traveling ☐ N ☐ E ☐ S ☐ W on

Vehicle 2 was Traveling ☐ N ☐ E ☐ S ☐ W on

DESCRIBE WHAT HAPPENED:

WIT- Name ______ Address ______ Phone No. ______

NESSES: Name ______ Address ______ Phone No. ______

ARRESTS: Name ______ Charge(s) ______ (Cit. No.) ______

Name ______ Charge(s) ______ (Cit. No.) ______

Sign Here: ______

Officer's Rank and Name Number Department Date of Report

VIOLATION INDICATED (Check as many violations as apply)

Driver 1 2

- ☐ ☐ 1. No violation indicated
- ☐ ☐ 2. Alcohol Use
- ☐ ☐ 3. Drug Use
- ☐ ☐ 4. Yield
- ☐ ☐ 5. Stop sign
- ☐ ☐ 6. Traffic signal
- ☐ ☐ 7. Exceeding speed limit
- ☐ ☐ 8. Exceeding safe speed

Driver 1 2

- ☐ ☐ 9. Minimum speed law
- ☐ ☐ 10. Pass stopped school bus
- ☐ ☐ 11. Passing on hill
- ☐ ☐ 12. Passing on curve
- ☐ ☐ 13. Other improper passing
- ☐ ☐ 14. Improper lane change
- ☐ ☐ 15. Use of improper lane
- ☐ ☐ 16. Improper turn

Driver 1 2

- ☐ ☐ 17. Improper or no signal
- ☐ ☐ 18. Improper vehicle equipment
- ☐ ☐ 19. Safe movement [illegible]ation
- ☐ ☐ 20. Following too [illegible]
- ☐ ☐ 21. Improper [illegible]
- ☐ ☐ 22. Improper parking
- ☐ ☐ 23. Unable to determine
- ☐ ☐ 24. Left of Center.

☐ ☐ 25. Other ______

RESERVED FOR CITY OR OTHER USE

RESERVED FOR STATE USE		
	Driver 1	Driver 2
24. Direction		
25. Violation		
26. Mis. Action		
27. Charges		
28. Investigating Agency:		

BEST COPY AVAILABLE

II. EXAMPLES OF PAST AND CURRENT BICYCLE LAW ENFORCEMENT PROGRAMS

While most police departments include bicycle safety in their overall school safety programs, very few complement this educational effort with an active program of bicycle law enforcement, either for juvenile or adult riders. For juveniles in particular, there is the feeling that issuing a warning or ticket is "bad PR" for the police department. Officers may find this to be one of the least enjoyable aspects of their job and may (rightfully) conclude that even if they tried to enforce road rules for young bicyclists, they would not receive the necessary support from either parents or the courts.

There are, however, a few communities that have recognized the important role that bicycle law enforcement can play in creating a safer bicycling environment, and that have gone on to implement an effective enforcement program. The chart on the following pages lists the major programs that have been documented in the literature and summarizes their basic features. Attachment A contains a more detailed description of each of the programs along with references and the names, addresses and telephone numbers of key persons in the program who might be contacted for further information. While this list is undoubtedly not exhaustive of all bicycle law enforcement programs in the country, it should include most of the major programs and at the same time present a good feel for the state of the art in this area.

In most all cases the enforcement programs identified have been well received by law enforcement officers, parents and bike riders alike. However, not all have managed to survive, particularly those that were the by-product of specific government funded research (such as the Santa Barbara and Santa Clara, California projects) and others that were initiated with federal or state monies but then were unable to generate their own funding after this was ended. Still, there are a few enforcement programs that have survived a remarkable span of time -- both the Dallas, Texas bicycle court system initiated in 1942 and the Concord, California (1959) and El Cajon, California (1963) peer courts still receive the support of their communities. Also, the successes of Minnesota and Illinois in initiating community bicycle safety and enforcement programs with relatively small state and federal grants and then after a period of two or three years turning these over to the community must be noted. Although not shown on the chart, during fiscal year 1979-80 the Minnesota Department of Public Safety funded bicycle safety programs (primarily bike patrols) in 24 communities. Michigan is another state that apparently actively assists communities in initiating bicycle education and enforcement programs, although documentation here is incomplete.

While considerable variation exists among the programs, all have common elements that contribute to their success. These include:

- The commitment of a full-time bicycle safety officer, or similar person, with primary program responsibility.
- Strong community suport achieved through favorable press releases, mass media campaigns, public events such as bike rodeos, presentations to PTA and other civic groups, etc.
- The effective combining of education with enforcement, so that the public knows beforehand what is being enforced and why.
- The support of the local judicial system, and an approach to adjudication that emphasizes education rather than punishment.
- The commitment of police officers, bike patrols, etc. to actively enforce road rules for bicyclists, and a set of enforcement procedures (ticketing guidelines, forms, etc.) that facilitates this enforcement.

The program overviews presented in Attachment A reveal a broad range of approaches taken in enforcing traffic laws for bicyclists. The interested reader may want to follow up on those that seem particularly successful or that might be adaptable to his/her own community. It should be stressed, however, that an enforcement program that works well for one community will not necessarily function as successfully in another environment. Each community has its own particular needs, resources, cycling environment, level of support, etc. that will impact on an enforcement program. That is why, instead of recommending any single approach to bicycle law enforcement, this manual presents the full range of methods and techniques that have been tried, and leaves the final decisions on program design and implementation to the individual community. This section gives the program overviews. The following section then examines the specific who, what, where and how of bicycle law enforcement, so that communities can select from these to design and implement the program that best meets their own special needs.

LIST OF EXAMPLE PROGRAMS

Location	Population	Project Duration	Approx. Cost	Program Components	Enforcement Responsibility	Adjudication	Remarks
Mt. Prospect, Illinois	50,000	1975-1977	$27,000 per year	Education ("Officer Friendly"), enforcement, registration	Regular police officers	Peer court	"Guilty" violators sentenced to safety school
Waukegan, Illinois	65,000	1976-1980	$45,000 per year	Education ("Officer Friendly"), enforcement, registration	Regular police officers and cadets	N.A.	Never got beyond warning citations--peer court not instituted
Skokie, Illinois	70,000	1977-present	$23,000 per year	Education ("Officer Friendly"), enforcement, heavy media campaign	College students on summer patrol	Peer court	Enforcement emphasis--26% decrease in accidents
Morton Grove, Illinois	30,000	1977-1979	$28,500 per year	Education, enforcement, registration	Five bicycle cadets	Safety seminars and youth commission	Little emphasis on adjudication resulted in low attendance
Northbrook, Illinois	30,000	1977-1980 (interrupted)	$33,000 per year	Education ("Officer Friendly"), enforcement, registration	Two part-time cadets	Unknown--warning citations issued	Education emphasis
Des Plaines, Illinois	57,000	1972-present	?	Education, enforcement, licensing	Bicycle enforcement registration	Peer court	Good organization
Cranford, New Jersey	30,000	1973-present	$1,000 per year + volunteer	Education, enforcement, registration	Regular police officers	Warning plus letter to parents; conference with juvenile safety officer for repeat offenders	Comprehensive--good community support

Location	Population	Project Duration	Approx. Cost	Program Components	Enforcement Responsibility	Adjudication	Remarks
Santa Barbara City	70,000	1973-1975	?	Education ("Ghost Rider", radio & TV spots, etc.), enforcement	Regular police officers	Warning plus letter to parents; court appearance for repeat offenders	Emphasis on police training, community awareness
Santa Barbara County (10 police agencies*)	264,000	1977-1979	N.A.	Enforcement, education (?)	Regular police officers	Bicycle violators class for adult offenders; warning + letter for juveniles	Emphasis on selective enforcement, based on data from Cross study
Concord, California	85,000	1959-present	?	Education ("Officer Friendly"), enforcement	Regular police officers	Concord Bicycle Traffic Court (peer court)	Long term model program
Davis, California	24,000	1964-present	?	Enforcement, education, registration	Bicycle officer, other police officers as needed	Group meeting with Juvenile Traffic Hearing Officer	Long term
Santa Clara, California	500,000	1974-1978	?	Enforcement, education	Regular police officers	Warning letter and bicycle safety class	Documentation incomplete
Temple City, California	30,000	1970-1972	?	Enforcement, education	Community traffic safety officer + fellow police officers	Warning, safety class, or regular citation	Documentation incomplete
Madison, Wisconsin	165,000	1977-1980 (3 yrs)	$60,000 per year	Enforcement	Civilian patrol on bikes (n=12)	Warning or traffic citation + fine	Effective but relatively expensive

*Unknown to what extent various agencies actually participated in project

Location	Population	Project Duration	Approx. Cost	Program Components	Enforcement Responsibility	Adjudication	Remarks
Lansing, Michigan	132,000	1978-1981 (3 yrs)	$25,000?	Education, enforcement, registration	Civilian patrol on bikes (n=22)	Warning only--no follow-up	Final project report not yet available
Ann Arbor, Michigan	106,000	1980	$10,000 (does not include time of bicycle coordinator)	Enforcement	Civilian patrol on bikes (n=6)	Bicycle Safety Violation notice, with no follow-up or fine	
Richfield, Minnesota	47,000	1976-present	$32,000	Enforcement, education	Civilian patrol on bikes (n=6)	Warning + letter to parents and requested attendance at bicycle safety seminar. Juvenile Traffic Court for repeat offenders	Well organized
Hastings, Minnesota	12,000	1977-present	?	Enforcement, education	"Safety Officers" (some on bikes)	Warning followed by letter to parents, Bicycle Safety School, or juvenile warning tag	Well organized
Dallas, Texas	1,300,000	1942-present	N.A.	Enforcement, education	Regular police officers	Juvenile Traffic (peer) Court hearing	Long term
Geelong, Victoria, Australia	?	1976-present	$1.6 million	Enforcement, education	Regular police officers	Warning or citation to Children's Court or Magistrate's Court	Expensive, well-planned undertaking

EXAMPLE PROGRAMS

ATTACHMENT A

PROGRAM DESCRIPTIONS

ATTACHMENT A

Program Descriptions

In an effort to determine the nature and scope of bicycle enforcement programs around the United States, many telephone conversations and letters requesting information were utilized. Contacts were made with: (1) bicycle program specialists[1], including administrators, coordinators, police officers, and evaluators, (2) private organizations like the Bicycle Manufacturers Association, (3) bicycle contract managers within the National Highway Traffic Safety Administration (NHTSA) and Federal Highway Administration (FHWA), both at the national and regional levels, (4) personnel in Governor's Highway Safety Program offices, (5) other university and private researchers, and (6) many others in varying roles.

HSRC also conducted a thorough search of the literature and review of federal expenditures for bicycle-related projects over the past several years. The resulting compilation of bicycle enforcement programs, both past and present, is summarized in this attachment. As noted in the text, this list may not be exhaustive; undoubtedly there are other communities in the country that have developed special approaches to bicycle law enforcement. Nevertheless, we do feel that this review is fairly complete in terms of the more significant enforcement efforts, and that it gives a good feel for the types of programs developed.

It should be noted that very few programs have been thoroughly evaluated, and this is reflected in the way the basic program descriptions are written. The evaluation judgments generally reflect the words and data presented by individual authors (sometimes program administrators), rather than an objective appraisal by HSRC. Detailed explanations are given as to why some programs fail and few words about the fate of others. The absence of information cannot be used to construe either success or failure. The level of detail is in direct proportion to the available literature describing the program.

---

[1] Many of whom attended the PRO-BIKE 80 Conference in Asheville, North Carolina in November, 1980.

Illinois Programs

Programs in five localities were evaluated by the Division of Traffic Safety within the Illinois Department of Transportation. The programs generally followed the three-pronged approach of education, registration and enforcement, and a police officer designated as "Officer Friendly" was a prominent feature.

Mt. Prospect, a relatively affluent Chicago suburb with approximately 50,000 population, received the first grant funds. The grant was for three years (1975-1977), and costs were $19,000, $29,000 and $33,000, respectively. Emphasis was on bicycle safety education and included school presentations, bicycle rodeos, and safety seminars. "Officer Friendly" gave safe riding instructions to children in the fourth through the eighth grades. A videotape study of the children receiving the instruction revealed only a short term positive effect.

Another large program component was bicycle registration. While bicycle theft did not decrease, the registration effort resulted in large increases in the percentages of stolen bicycles ultimately returned to the owners.

The enforcement of traffic laws pertaining to bicyclists was performed by regular police officers and police assistants in squad cars. The number of citations and warnings was:

1st year - 271
2nd year - 223
3rd year - 534

Most of the violators (accompanied by parents) were required to attend a peer court based on an El Cajon, California model. Court was staffed by youngsters from the community with procedures not unlike regular traffic court. Court attendance was excellent, and the customary sentence was to attend a bicycle safety school consisting of films, presentations, and instruction on safe riding.

Overall, accident frequency decreased, but the change was statistically non-significant. Also, the percentage of at-fault bicyclists in accidents decreased from 67 percent to 36 percent during the first year of the project but climbed back to 61 percent in the third year.

Waukegan, another Chicago suburb (population 65,000), conducted a three-year program (with some time lapses) from 1976-1980 at an average cost of $45,000 per year. A city ordinance was passed requiring registration and enforcement of bicycle violations. The first year of the program focused on the "Officer Friendly" concept, supplemented with bicycle rodeos concerned with safety. In addition, regular police officers issued warning citations. Organizational problems were apparent during this first year.

In the second year, 14 bicycle cadets were utilized for patrolling during the summer months, although their contacts per hour were comparatively low. Regular police officers also participated, but the city administration disapproved the ticketing of children, resulting in limited enforcement activity. The city also failed to implement the peer court, and only follow-up warning letters to parents were utilized. Over the project period, the accident data tended to fluctuate. However, large decreases were noted in the percentage of at-fault bicyclists.

Skokie (population 70,000) has an on-going program that began in 1977 and includes educational and enforcement concepts similar to Mt. Prospect and Waukegan. Some additional activity had been present in the schools for several years preceeding the grant, and the grant allowed the hiring of ten college students to patrol in the summer. The patrol issued both warnings and citations. Violators who were minors were requested to appear with parents in a peer court. Peer court sentences included essay assignments or small fines. Court was set for Saturdays and attendance was reported as excellent. Adult violators who were cited had to appear in the regular traffic court.

Besides a heavy media campaign, Skokie differed from other communities by placing much emphasis on the enforcement phase, and the bike patrol averaged one contact about every half hour. Bicycle accidents decreased 26 percent during the first two summers.

Educating elementary school children was the emphasis of the program in Morton Grove, a suburb of some 30,000 located just north of Chicago. Other program elements included bicycle registration and enforcement of bicycle laws by five bicycle cadets who patrolled during summer months. The first year of the project cost approximately $32,000.

Concerning education, a Bicycle Ordinance Officer designed her own audio-visuals and made safety presentations to 132 classes of elementary school children. The registration program resulted in only some 600 bicycles registered by the end of the first year, which was far below the expected number of 15,000-20,000. The enforcement effort received more emphasis than the registration component, and during 1,874 hours of patrol the five cadets issued 394 warnings and 37 citations (the equivalent of one contact every 4-1/2 hours.)

The adjudication phase was not very successful. Letters were sent to parents of children receiving warnings, requesting that both child and parent attend a Bicycle Safety Seminar; however, only 13 percent of this group attended. Children issued citations were to appear before a youth commission, but the commission was never established. Finally, no adult riders were ever referred to regular traffic court.

Little evaluative data are given, but bicycle accidents showed a small decline. However, a rather large downward trend had been in effect several years prior to project initiation.

Northbrook (population 30,000) stressed the "Officer Friendly" concept to kindergarten through third grade students. Enforcement was performed by two police cadets during the summer and yielded one warning for each 1-1/2 hours of patrol. The cadets also spent a great deal of time handling the registration phase at schools and on the streets. The project period showed fewer bicycle accidents than previous years, but numbers were very small.

In addition to these five localities, the city of Des Plaines (population 57,000) started a comprehensive bicycle safety program in 1972 that included such components as enforcement, bicycle licensing, education, and adjudication. It appears that effort was taken to coordinate with city officials all along the way so that the program was initiated without major organizational problems. Such an approach would be recommended for any city starting a new program (i.e., know what you're going to do and get the necessary community support early in the game).

Before the program, bicyclist violation notices were rarely given. The new set-up assigned a single person as the bicycle enforcement officer, supplemented by selected officers (although all officers had authority to issue violation notices). The bicycle officer patrolled in a marked police car. Other duties included: (1) set up and assist the operation of the Bicycle Violators Court (peer court), (2) coordinate the safety (educational) program, including making presentations, (3) make "on-the-spot" registration of bicycles, and (4) maintain the necessary records.

Example materials from the Des Plaines operation appear in appropriate sections of this manual. Their program plan includes information on the peer court procedure, the proposed violator ticket, the proposed notice to parents, recommended changes to the city code, and a bicycle license plan.

References:

Sidhu, C.S., O'Brien, J.P. and Berroyer, C.J. Illinois Bicycle Safety Program Evaluation Report (Draft Copy). Springfield: Illinois Department of Transportation, Division of Traffic Safety, October 1980.

Scheskie, J.R. and Neil, R. Proposal for Organization and Function of Bicycle Safety Program. Des Plaines, Illinois Police Department, 1972.

Contacts:

Pamela S. Marsh
Illinois Department of Transportation
Division of Traffic Safety
2300 South Dirksen Parkway
Springfield, Illinois 62764
(217) 782-5833

Des Plaines Police Department
(312) 297-2131

Cranford, New Jersey

Cranford, New Jersey (population 30,000), initiated its "Bicycle Safety Alert" campaign in 1973. The campaign was a massive bicycle safety publicity effort involving cooperation from the Cranford Police Department, the schools, the PTA's and the town council, as well as libraries, merchants, newspapers and service organizations. It has been reinstituted each year with the help of a $1,000 allotment from the city and the full-time commitments of the police bicycle safety officer and the PTA safety officer.

The Bicycle Safety Alert extends for a period of two months, April and May, during which specific bicycle safety themes are emphasized. For example, during the first year of the program the themes featured were: (1) Ride right, (2) Ride one on a bike and (3) Light bike. A variety of approaches are utilized to transmit these themes to the public, including large (4 ft. by 18 ft.) banners strung from railroad trestles crossing over the main street of town, colorful buttons, posters displayed by area merchants, balloons, specially designed placemats in local restaurants, poster drawing contests, bike hikes, rodeos, etc.

Other aspects of the Cranford bicycle safety program, including bicycle law enforcement, education and registration, extend throughout the year. Regarding enforcement, all city police officers actively participate in enforcing traffic laws for bicyclists. Warning citations, followed by a letter to parents, are issued to juveniles observed violating a law, and repeat offenders are scheduled for a conference with the juvenile safety officer. Adults receive a regular summons requiring a court appearance and payment of a fine that averages approximately $15.00. In addition all patrol cars are equipped with bicycle racks for the purpose of impounding bicycles. The law allows for a bicycle to be impounded if a serious offense has been committed, if the bike is judged to be in an unsafe riding condition, or if it does not display a clear registration number.

The Cranford police issue approximately 800 citations and impound about 80 bicycles each year. This represents a yearly citation rate of 3%, almost all of which is directed toward juveniles. The number of repeat offenders is quite low, and it has been noted that especially in recent years a fairly large percentage of the citations are directed at bicycle riders visiting from outside the area. The general feeling is that the program of bicycle education and enforcement has resulted in considerably improved bicycling habits in Cranford.

One evaluation showed that the number of reported bicycle accidents had declined. In 1974, the first year of the project, the number of accidents decreased by 45% and the number of injuries by 50%, and this was despite an increase in the number of bicycles in use.

The Cranford, New Jersey bicycle safety program has been recognized as one of the most successful of its kind in the country. Much of this can be attributed to the dedicated efforts of the police bicycle safety officer and PTA safety officer, who not only have obtained the full support of the police department and the town council but who have actively involved the entire community in the safety program. The program has effectively combined the two critical areas of bicycle safety education and law enforcement and in addition has provided services in the areas of registration, theft protection and bikeway planning. All of this is accomplished at very little cost to the town, since so much is dependent on volunteer work. At a time when many bicycle safety programs are being discontinued because of funding cutbacks, this may become an even more critical factor to program success.

References:

Cranford Police Department. Bicycle Safety Alert Program. Cranford, New Jersey. Author (n.d.).

Contacts:

Ms. Sandra Weeks
PTA Safety Officer
(201) 276-3368 (home)

Sgt. Thomas Kane
Police Bicycle Safety Officer
Cranford Police Department
8 Springfield Avenue
Cranford, NJ 07016
(201) 276-0170

Santa Barbara, California

Santa Barbara, California (population 70,000) has been the site for several bicycle safety and law enforcement projects over the past ten years. During 1972-73, the City of Santa Barbara under funding from the California Office of Traffic Safety carried out a comprehensive analysis of bicycle/motor vehicle accidents occurring in the Santa Barbara area during 1970-1972. Also under this project the rate of certain bicycle violations was determined using on-the-road observations, and approximately 3,000 bicyclists and motorists were surveyed via mail questionnaire concerning their knowledge of bicycle/motor vehicle laws and their attitudes toward these laws and toward each other.

These investigations revealed that (1) bicyclists were at fault in 61% of the bicycle/motor vehicle collisions, (2) knowledge of traffic laws is not correlated with accident involvement, and (3) younger cyclists score higher than older cyclists in "risk taking" behaviors. As a result of these findings the City of Santa Barbara recommended implementing a comprehensive program of bicyclist education and enforcement. This plan was subsequently developed and documented in a 1973 report, "Bicycle Enforcement Program," prepared by the Santa Barbara Police Department. This initial program was implemented by the Police Department during 1973-75. Components of the program included:

(a) A police training program, designed to obtain the willingness of officers to enforce traffic laws with regard to the bicyclist and to introduce an enforcement procedure that would enable the officer to handle the young violator in a different manner than adults; and

(b) A community awareness program to enhance the image of the police officer and to demonstrate the necessity for the implementation of such an enforcement program.

Briefly, responsibility for the enforcement of traffic laws for bicyclists was delegated to all police officers, with each officer required to file at least one ticket per week. Prior to the start of the program officers were presented with a 10-minute video training tape that gave an overview of the bicycle accident problem and described the officers' role in preventing accidents. They also heard a lecture focusing on local accident statistics and explaining the new enforcement procedures to be followed. These included issuing a Bicycle Warning Card to first-time juvenile offenders, followed by a letter to the parents. For repeat offenders (those with two or more violations within a 30-day period) a Notice to Appear in juvenile court could be issued at the officer's discretion. The actual mailing of the notices and letters to parents was handled by a clerk who was also responsible for maintaining a file of all bicycle violations over the past 90 days.

The educational program that accompanied these enforcement efforts involved an expanded "Ghost Rider" program at the elementary school level, the dissemination of information about the bicycle enforcement program and its purposes to secondary school students, and a series of radio and television spots, rodeo events, etc., aimed at informing the public about the need and benefits of increased enforcement of traffic laws for bicyclists.

The effectiveness of this combined enforcement/community education program was evaluated using the same technique of on-the-road observations of compliance with traffic laws as in the 1972 survey mentioned earlier, and comparing results. Basically this technique involved a two-man observation team in an unmarked patrol car following a bicyclist until he had an opportunity to either obey or disobey a traffic law. A total of 251 observations was completed during the 1974 (after program implementation) survey, compared with 500 observations made in 1972. Results show that the overall violation rate decreased from 55% in 1972 to 21% in 1974, and that all age and sex groups except one (a small number of females under age 13) shared in this trend.

Unfortunately, this observed decrease in violations was not accompanied by a decrease in accidents, primarily because the number of bicyclists in the area had apparently increased. In 1972 it had been estimated that there were 309 bicycles present on Santa Barbara City streets at a given time, compared with 535 in 1974. The average number of "bicycles per mile" increased about 70%, from 1.3 in 1972 to 2.2 in 1974.

Even though this initial Santa Barbara bicycle safety program was well received by the community and judged to be a success, just a few years later at the start of the Santa Barbara County Bicycle Safety Project, no police department in the area was actively enforcing traffic laws for bicyclists. The Santa Barbara County Project's solution to this problem lay in developing a program of selective law enforcement that could be implemented by a police department at little or no extra cost, and with a potentially large payoff in terms of accident reduction. This was accomplished by focusing on the six violations identified in the Cross (1977) study as most likely to result in an accident. The specific materials developed by the project included:

(a) Instructional information dealing with selective enforcement, derived from the Cross research;

(b) Approaches for motivating police officers toward active selective enforcement of bicycle laws, including a questionnaire, a film that vividly illustrated the need for enforcement and local bicycle accident statistics; and

(c) Flexible implementation procedures for the program.

Project plans initially called for working with the bicycle safety officer in each of Santa Barbara County's ten police agencies in presenting the selective enforcement class over a one-week period to members of the force. However, due to funding cutbacks accompanying the passage of Proposition 13, not all police departments were able to participate in the program as planned. In order to reach these departments, the project developed a video tape of the enforcement class that the police agencies could utilize as time permitted.

Another outgrowth of the project that was not originally planned for was a set of procedures for conducting a remedial class for adult violators. This class reflected Cross's findings that the majority of bicycle accidents are not caused by lack of knowledge of road rules, but by improper attitudes, behaviors and hazard perception. While the class was geared specifically toward the university population where it was to be pilot tested, it was intended to be readily adaptable to other populations and age groups as well.

The adult violators class is still being held on the University of California at Santa Barbara campus. Unfortunately a consistent level of bicycle law enforcement by the other area police agencies has not been realized. When a juvenile is cited for a bicycle violation, the usual procedure is to forward a copy of the ticket to the Santa Barbara Juvenile Traffic Court. For the first offense, the Juvenile Probation Officer will send a warning letter to the child's parents. For subsequent offenses, a hearing is arranged with the child, his parent(s), and the Probation Officer. At the hearing the Probation Officer discusses the importance of safe bicycle operation and may assign a special work project activity, written paper, etc. Thus, beyond the initial ticketing, the Santa Barbara area police departments are no longer directly involved in bicycle enforcement activities.

References:

Popish, L.N. and Lytel, R.G. A Study of Bicycle-Motor Vehicle

Accidents. Report prepared for the City of Santa Barbara, California, June 1973.

Santa Barbara Department of Public Works. Bicycle Safety: A Program of Implementation and Study. January 1975.

Santa Barbara Police Department. Bicycle Enforcement Program. Report prepared for the California Office of Traffic Safety, October 1973.

University of California at Santa Barbara Police Department. Santa Barbara County Bicycle Safety Project. Report prepared for the California Office of Traffic Safety, October 1979.

Contacts:

University of California at Santa Barbara Police Department
(805) 961-3446

Sgt. Abbott
Santa Barbara City Police Department
(805) 963-3616

Ms. Judy Duerr
Juvenile Probation Officer
City of Santa Barbara
(805) 967-5616

Concord, California

The Bicycle Traffic Court of Concord, California (population 85,000) is one of the oldest functioning bicycle peer courts in the country and has served as a model for many later programs. The Court was established in 1959 by the Juvenile Bureau of the Concord Police Department, with the approval of the County Juvenile Authority. It is presently under the direction of an overall bicycle safety program that also includes safety instruction in the schools ("Officer Friendly") and bicycle theft investigation.

The Concord Bicycle Traffic Court handles bicycle violations by young persons ages 10-17; younger violators receive only a letter warning to their parents, while older violators are cited to the regular adult traffic court. All Concord police officers are charged with issuing bicycle court summonses. One copy of the summons is given to the bicyclist and the second forwarded to the police officer responsible for scheduling the court calendar. A letter is then sent to the child's parents explaining the violation, the educational objectives of the court and the date for the required court appearance.

The bicycle officer oversees the court proceedings, but the court is staffed by students from the local high schools who are selected for a one year term on the basis of their scholarship and leadership capabilities. The students serve on a rotating basis as second associate justice, first associate justice, and finally chief justice. In addition, a member of the Concord Police Explorer Scouts serves as bailiff for the court. More detail on the actual operation of the court is available and is included in the adjudication section of this manual.

The chief justice is responsible for determining the disposition of all cases before the the court and can sentence a violator to one or more of the following:

(a) Obtain a bicycle license within 15 days;

(b) Have a Concord police officer check the bicycle equipment;

(c) Parents to deprive the use of any bicycle for a specific period of time;

(d) Copy a section of the Concord Bicycle Ordinance a certain number of times;

(e) Write a composition on a particular subject which is to consist of a minimum number of words;

(f) Verbal reprimand or suspended sentence.

All assignments, etc. must be fulfilled by the following Friday. Failure to do so results in a letter from the bicycle officer and possible referral to juvenile court.

The Concord Bicycle Traffic Court hears over 1,000 cases each year, with a recidivism rate of less than 3%. The violation trends and records are used by the Bicycle Safety Unit in planning safety programs for the schools. While no evaluative data were given in the report reviewed, the conclusion was made that

> The Concord Bicycle Traffic Court has proven itself to be a highly beneficial and educational program in bicycle safety and in introducing the young defendents and Justices alike to the judicial process.

References:

Concord Police Department. The Concord Bicycle Traffic Court. (pp. 20-43 of a larger report). Concord, California: Author (n.d.).

Concord Police Department Bicycle Safety Unit. Officer Friendly Presents. Concord, California: Author (n.d.).

Contacts:

Officer Ralph Lamb
Concord Police Department
Willow Pass Rd. and Parkside Dr.
Concord, California 94511
(415) 671-3263

II-A-14

Davis, California

The Davis, California (population 24,000) Police Department has had a safety program emphasizing bicycle education and law enforcement since 1964-65. The program is headed by the bicycle officer, an officer reserve who has had formal academy training. The bicycle officer patrols 20 hours a week on bicycle, and may periodically be joined by two or three other members of the police force whenever extra enforcement is needed. Parents of children stopped for a violation are mailed a letter that informs them of the violation and the disposition of the case. This can range from simply requesting that the parent discuss the matter with the child, to required attendance at a group meeting, to an appointment with the juvenile traffic hearing officer. The group meetings are generally scheduled for a Saturday morning, and the child must be accompanied by a parent. Adults (those aged 18 and above) are cited for regular traffic court but also have the option of appearing before a hearing officer under a current program. Fines imposed are generally $5 to $10.

In addition to these enforcement activities, the Davis bicycle safety program has incorporated a bicycle safety curriculum for grades K-9, a bicycle safety school to provide "on road" training in safe riding, a check day at the local schools to inspect bicycles for safety, and bicycle licensing. The bicycle law enforcement efforts by the City of Davis Police Department are also supplemented by similar activities carried out by two bicycle officers with the University of California at Davis Police.

References:

Pelz, D.B. Bicycle Programs: City of Davis. Davis City Council, (n.d.)

Contacts:

John Dasher
Davis Police Department
(916) 756-3740

Mr. David Pelz
Public Works Dirctor, City of Davis
226 F. Street
Davis, California 95616
(916) 756-3740

Other California Programs

At least three other California bicycle law enforcement programs are documented in the literature, one in Santa Clara County (population 500,000), another in Temple City near Los Angeles (population 30,000) and a third in El Cajon (population 60,000). Both the Santa Clara and Temple City programs were funded by grants from the California Office of Traffic Safety and the National Higwhay Traffic Safety Administration and are no longer active. In contrast, the El Cajon bicycle enforcement program continues to receive the strong support of its community.

Briefly, the Santa Clara project was a multi-jurisdictional effort focusing on increased bicycle enforcement along with education in the schools and a massive public informaton campaign on bicycle safety. During the two years of the project police officers from 14 jurisdictions issued a total of 4,000 citations to bicyclists. These were forwarded to the safety project, which then sent a warning letter to the offender's parents. All violators between the ages of 13 and 17 (and those under 13, in the case of repeat offenders) were required to attend a bicycle safety class run by police officers who had received special training from the project staff.

After initial funding for the project ended, the Santa Clara Chapter of the National Safety Council was able to continue some aspects of the program for another three years until the passage of Proposition 13 dealt its final blow in 1978. Like many other bicycle safety programs, the Santa Clara program was clearly a success in the eyes of the public; however, for various reasons good evaluative data particularly in the form of accident statistics are not available to effectively document this success.

The Temple City project ran from 1970-1972, and combined bicycle enforcement with a strong educational program in the schools. When the results of a survey showed no structured safety curriculum in the school district, a totally new curriculum was developed that incorporated features of existing programs such as Safety Town. After the curriculum was implemented in grades K-6, the Community Traffic Safety Officer, assisted by his fellow police officers, began active enforcement of traffic laws for bicyclists as well as pedestrians. Those stopped for a violation could receive either: (1) a verbal warning (2) a notice to appear at a Saturday morning safety class taught by the Bicycle Officer, or (3) a regular citation for appearance in traffic court, depending on the severity of the violation, the attitude shown, and whether or not there had been previous violations.

One interesting outcome of the Temple City project was that selective observations of pedestrian and bicycle violations showed that students obeyed the law whenever they could see the Community Traffic Safety Officer, but when the Officer was not on the scene there was an increase in violations. This was felt to be "strong evidence that consistent enforcement is necessary and that a consistent education program is essential."

Although a project report was never received from El Cajon, California, a few descriptive sentences should be offered about this program which started in 1963. A peer court staffed by high school students is conducted on Saturday mornings. Sentences involve at least an essay about the particular offense and the general law. A bicycle safety class taught by police officers is offered after court. The program has good community support.

References:

Baldwin, L. Enforcement: Programs and Problems in Four Communities. Bicycle Forum, No. 4, fall 1979, pp. 20-25.

Temple City Unified School District. Pedestrian-Bicycle Safety Education and Enforcement Project. Temple City, California: Author, June 1972.

Contacts:

Dick Rogers
State Bicycle Coordinator
California Department of Transportation
Sacramento, California
(916) 445-7345

Officer Larry Groll
El Cajon Police Department
Traffic Division
(714) 579-3356

Madison, Wisconsin

The State of Wisconsin Department of Transportation has developed materials and guidelines to assist local communities in implementing bicycle safety programs. A 1973 publication, "Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities," contains a model bicycle ordinance, suggested procedures for implementing a bicycle registration and licensing program, bicycle rodeo "how-to's" and a description of a bicycle peer court similar to that employed in Concord, California. More recently, the Office for Highway Safety has developed specific guidelines for conducting a bicycle safety school for violators, including a course outline, discussion group guidelines, bicycle driver test, and list of suggested films. There is also an outline for a class in bicycle law enforcement for officers attending the Wisconsin Police Academy.

While all Wisconsin law enforcement agencies are encouraged to adopt policies and procedures conducive to active enforcement of traffic laws for bicyclists, the City of Madison Police Department has perhaps been the most active and innovative in this area. Madison, population 165,000 and the site of the University of Wisconsin, has an unusually large bicycle population. There are roughly twice as many bicycles as automobiles, and an estimated 50,000 bikes are in use at any one time.

The Madison Pedestrian/Bicycle Monitor Program was initiated with State money in 1977 with the specific goals of: (1) reducing the number of accidents by improving bicycle riding behavior, and (2) effectively integrating the bicycle into the Madison traffic flow. The program focused around the hiring and training of 12 bike monitors to work full time from May-October for each of the three years of the project (1978, 1979 and 1980). The monitors worked either singly or in pairs in two 6-7 hour shifts that began at 7 a.m. and ended at 9:30 p.m. Riding 10-speed bicycles and wearing special uniforms, they patrolled set routes designated by the Police Department. They were authorized to issue traffic citations (adult, juvenile and parking) with fines ranging from $16-$29, but could also opt for either a verbal or written warning.

During the final year of the project, approximately 15,000 citations were issued, and over 1,000 of these were to adults. The monitors averaged one citation every 6 hours, and had approximately five contacts with either bikers or pedestrians each hour. Overall, the program was judged a success. However, it was relatively expensive to operate ($60,000 total cost from May-October), and the City of Madison chose not to pick up the funding for 1981.

References:

Cardarella, S. and Rankin, R. Bike Patrols Peddling Safety. Madison, Wisconsin: Madison Police Department Safety Education Office, Fall 1980.

Hurley, J.L. and Thompson, R.L. Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities. Madison, Wisconsin: Division of Highway Safety Coordination, January 1973.

Madison Police Department.[1] Pedestrian-Bicycle Monitor Program Report. Madison, Wisconsin: Madison Police Department Safety Education Unit, August 1981.

Contacts:

Officer Steve Cardarella
Safety Education Office
Madison Police
P.O. Box 1188
Madison, Wisconsin 53101
(608) 266-4275

Ronald L. Thompson
Pedestrian/Bike Safety Specialist
Wisconsin Office for Highway Safety
P.O. Box 7910, Room 936
Madison, Wisconsin 53707
(608) 266-7855

---

[1] This report was just received at press time and contains lots of additional materials concerning the role of the bicycle patrol, activity sheets, violations and charges, examples of evaluation data, etc. The report would be a comprehensive reference for any community interested in bicycle law enforcement.

Lansing, Michigan

Bicycle education and law enforcement activities in Michigan have received considerable coordination from the State 4-H Program. Under a three-year grant from the Office of Highway Safety and National Highway Traffic Safety Administration, the capital city area of Lansing (population 132,000) was assisted in amending its bicycle ordinance according to developed guidelines, implementing a computerized registration system, and establishing a police bicycle patrol. The project ended in March 1981, although some final evaluations were still being carried out as of June 1981.

A large part of the Lansing bicycle enforcement effort involved training the bike patrollers. There was a total of 22 patrollers, aged 18-34, hired with CETA (Comprehensive Employment Training Act) funds. The patrollers each received training in Effective Cycling[1] and law enforcement in an 80-hour course developed by the project staff and taught at the Police Academy in Lansing. Even though they were not full fledged police officers, they were allowed to issue regular traffic citations. (Later in 1980 the Michigan law was amended to limit this practice to police officers with 300 or more hours of training. See the Ann Arbor program description that follows.) The patrols worked regular 40-hour weeks and spent most of this time engaged in active patrol on their bikes, wearing helmet and uniform. They also assisted with presentations at the local schools and other educational activities.

The majority of the encounters made by members of the Lansing bicycle patrol were with juveniles. One evaluation early in the project showed that 6% of the violators were aged 5-8, 21% aged 9-11, 30% aged 12-14, 25% aged 15-18, and only 13% aged 19 or over. An evaluation of type of violation showed almost a third to be equipment violations (N = 1,728), with two-thirds of these citing the absence of required rear or side reflectors. Of the operational violations (N = 3,916), by far the most common was riding without a license, a hefty 48% of the total for this group. Other operational violations in order of decreasing frequency were: (1) riding on the wrong side of the street, (2) carrying an illegal passenger, (3) careless or reckless riding, (4) riding on sidewalks, and (5) running a traffic light or signal.

---

[1] Forester, J. Effective Cycling. Sunnyvale, California: Custom Cycle Fitments, 1978.

One admitted weakness in the Lansing bicycle enforcement program was that there was no procedure for following up written warnings with any sort of educational information or remedial action. However, a follow-up survey of a sample of violators showed that 83% were in favor of the bicycle patrol continuing, 98% felt that their violation had been clearly explained to them, and 83% felt that those receiving written warnings deserved them. Additional evaluative data will be available in the final report on the project.

References:

Baldwin, L. Enforcement: Programs and Problems in Four Communities. Bicycle Forum, No. 4, Fall 1979, pp. 20-25.

Wigan, M.R. Enforcement of Bicycle Laws and Ordinances. Internal Report AIR 812-8. Vermont South, Victoria: Australian Road Research Board, March 1980.

(Final project report not yet available from the Michigan 4-H Youth Programs Office in East Lansing.)

Contacts:

Lowell Rothert
Program Leader, Michigan 4-H Youth Programs
East Lansing, Michigan
(517) 353-6391

Ann Arbor, Michigan

Ann Arbor, Michigan, with a population of 106,000 and an estimated 50,000 regular bicyclists, received funding from the Michigan Energy Administration to operate a bicycle patrol during the summer of 1980. Overall direction for the project was provided by the bicycle coordinator for the city. Four patrol members were hired in June and three additional patrolers in July when CETA funds became available. Training for the original patrols consisted of Forester's "Effective Cycling" course plus on-the-road experience in spotting traffic violations and instruction in how to deal with violations. The later patrols received most of their training "on the job" and, according to the program director, were never as effective as the original patrols.

Actual patrol work began the end of June and extended through the latter part of August. The patrol members were instructed to concentrate their efforts on bicyclists who were running signs and signals or who were biking against traffic. During 334 hours that the patrol was on the road, 289 stops were made (.87 stops per hour). Under the recently revised Michigan law, the patrol could not issue traffic citations, only verbal or written warnings. When a bicyclist was stopped for a violation, the patrol member would explain the violation and the danger involved and distribute specially prepared safety literature. The patrol also made many contacts with persons who had not committed a violation, but simply needed information or assistance. One morning each week the patrol carried out other "off bike" duties -- either making bicycle traffic counts or tallying violation patterns at particular locations.

The age group receiving the greatest number of citations was the 18-30 year olds, those riding bikes around the campus area of the University of Michigan. Generally it was felt that the younger bike riders in the city obeyed traffic laws to a much greater extent than these adult riders. The inability of the patrol to issue standard traffic citations and fines undoubtedly contributed to this situation. Although the patrol was felt to be very effective in terms of creating good public relations and safety consciousness, it was unable to impact significantly on the day-to-day riding behavior of this large segment of the Ann Arbor bicycle population. Consequently, while the overall project effort was judged "well worthwhile," it was suggested that the active involvement of the Police Department in bicycle law enforcement might be preferable for this particular setting.

References:

Lagerway, P.A. and Pendleton, T.S. Designing and Implementing a Bicycle Patrol: A Report on the 1980 Ann Arbor Bicycle Patrol for the Michigan Energy Administration. Bicycle Program, Transportation Department, City of Ann Arbor, Michigan, 1981.

Contacts:

Tom Pendleton
Bicycle Coordinator, City of Ann Arbor
City Hall, 100 N. Fifth Avenue
P.O. Box 8647
Ann Arbor, Michigan 48107
(313) 994-2814

Minnesota Programs

One of the most active states in the area of bicycle law enforcement is Minnesota. During 1979, 11 communities received federal funding through grants from the Minnesota Department of Public Safety to implement bicycle safety programs. During 1980, 24 communities applied for and received funding, including 10 from the previous year. The grants awarded have generally been small, ranging from less than $1,000 to $5,000. Communities are eligible for the grants for a maximum of two years and after this increased local funding is usually needed to continue the program.

The Minnesota bicycle safety programs are comprehensive in scope, involving the police, courts, schools and a variety of community support organizations. Of the 24 programs funded in 1980, 20 utilized summer bike patrols, usually young persons hired and trained especially for this role. The patrols are usually authorized to issue regular traffic citations to adult offenders and a warning notice followed by a letter to parents for juvenile offenders. Most of the programs also feature a Bicycle Violator Seminar for young persons receiving warnings. Special bicycle courts may be held for those refusing to attend the safety seminar and for more serious or repeat offenders. Here the judge, after talking with the young bicyclist and his/her parents, may impose a fine, an order to attend a seminar, or a work squad assignment.

As is the case in Michigan, the State 4-H program, through its own grant with the Department of Public Safety and Department of Education, has played a very large role in coordinating efforts among the various communities and providing needed technical assistance. Some of the services provided by the Minnesota 4-H program include:

- Distribution of The Bike Safety Instructor's Guide and Bicycle Safety: A Community Planning Kit to all communities participating.
- Conducting a statewide bicycle safety conference.
- Conducting a one-day workshop for persons in charge of hiring, training and supervising bike patrols.
- Conducting a five-day bike patrol training workshop on teaching and enforcement techniques and police procedures, using role playing and video tape simulations.
- Sponsoring a bike patrol evaluation meeting at the end of the season to provide input for future training and program needs.

These and other 4-H activities have helped to establish a communications network among the communities, providing them with an avenue for exchanging ideas, information, and in some cases on-site program assistance. The 4-H Office is also actively involved in the evaluation of the safety programs and in making recommendations for future training and support systems.

Two of the Minnesota bicycle safety programs that have been particularly well received and that now function with only local monies are Richfield (population 47,000) and Hastings (population 12,000). The Richfield Bicycle Safety Program was initiated in 1976. The enforcement component of the program centers on six college students hired each summer to serve as bike patrols. The bike patrols attend a one-week training session in June at the 4-H sponsored Bike Patrol Training Workshop, receiving instruction in patrol duties and responsibilities in the areas of enforcement, education and program administration.

The Richfield bike patrols wear uniforms, ride 10-speed bicycles, and carry walkie-talkies to communicate with each other and the police department. They work on one of two shifts, either 10 a.m.- 6 p.m. or 2 p.m.-10 p.m., and ride singly except after 8 p.m. when they ride double. Juveniles observed breaking the law are given either a verbal or written warning, followed by a letter requesting their attendance at a safety seminar. Adult violators are only given warnings by the Patrol; however, they can receive a regular traffic citation from a Richfield police officer. Police officers also frequently stop and issue warnings to juvenile bicyclists observed violating the law.

The Bicycle Safety Seminar is conducted by members of the bike patrol under the supervision of a police training officer. Two to three seminars are held each week during the summer months, with 25-30 young people in attendance. The seminars deal with bicycle traffic laws and safety procedures, how accidents occur and how they can be prevented, and bicycle maintenance, safety checks and theft prevention. The seminars utilize a variety of teaching techniques including written pre- and post-tests, slide presentations showing familiar streets and intersections in Richfield, movies, overhead projectors and chalkboards to diagram accidents, etc. One seminar is geared toward 7-12 year-olds and another toward 13-17 year-olds.

Bicyclists receiving a second written warning are allowed to attend a second seminar. However, those receiving a third notice within a one-year period, or those refusing to attend the seminar or showing a poor attitude are referred to the juvenile court. Approximately 25 bicyclists appear in court each year. The emphasis in both the seminar and the court appearance is on educating rather than punishing the young violator. Other educational aspects of the Richfield program include bicycle safety classes in all public and private schools, special instruction for adults, and classes conducted by the bike patrols at summer parks.

The Hastings Bicycle Safety Program, which was initiated in 1977, is very similar to the Richfield Program. Patrol responsibilities are performed by bicycle safety officers, usually riding 10-speed bicycles but sometimes using squad cars. Another difference in the program is that the follow-up warning letters sent to the parents of juveniles stopped for a violation do not always mandate attendance at a bicycle safety seminar. The following tables give a good summary of bicycle enforcement activities in Hastings over the past four years:

Bicycle safety program summary statistics for Hastings, Minnesota.

	1977	1978	1979	1980
Total Tickets	1,074	330	415	354
1st Violation	879	277	244	320
2nd Violation	161	25	91	30
3rd Violation	29	1	33	4
Juvenile Warn Tag	0	0	16	13
Juvenile Court	2	2	2	6
Citations	0	0	0	3
Safety Seminar	12	8	6	7
Number of Violations	494	238	186	195
Verbal Warnings	390	870	1,000	1,100
Pedestrian Warnings	100	95	50	30
Written Warnings	1,074	330	415	354
Mileage	1,303	2,104	2,200	2,000
Hours Worked	800	765	650	675
Accidents (Bike - Car)	2	1	4	1

Bicycle violation types reported for Hastings, Minnesota.

	1977	1978	1979	1980
Stop Sign	298	114	199	185
Wrong Side of Road	262	103	125	112
Illegal Passenger	105	49	37	53
Middle of Road	139	71	62	52
No Signal	224	98	114	50
No Hands	71	37	32	37
Careless Driving	46	29	30	20
No Rear Reflector	0	0	13	11
Wrong Way on One-Way	20	13	11	7
No Light	0	0	13	6
Unsafe Bike	0	0	0	2

Bicycle safety programs in Richfield, Hastings and the other Minnesota communities have benefited greatly from the coordinating role played by the Minnesota 4-H and the variety of training sessions, resource materials and opportunities for communication and information exchange provided. Since the programs have been quite well documented in a variety of project reports, other communities outside the state wanting to implement similar sorts of enforcement programs can share in many of these benefits.

References:

Davis, J.E. *Richfield Public Safety Department Bicycle Safety Program.* Richfield, Minnesota: Department of Public Safety, (n.d.).

Hastings Police Department. *Summary. Hastings Bicycle-Pedestrian Safety Program.* Hastings, Minnesota Police Department, 1980.

Minnesota 4-H Youth Development Office. *Bike Patrol Training Manual.* St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

Minnesota 4-H Youth Development Office. *Bike Safety Instructor's Guide.* St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

Wagner, S. *1980 Community Bicycle Safety Program: Final Report.* St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, 4-H Youth Development Office, January 1981.

References (Con't)

Wagner, S. 1979 Community Bike Safety Project Report. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, 4-H Youth Development Office, October 1979.

Contacts:

Sharon K. Wagner
Community Bike Safety Program Coordinator
4-H Youth Development
University of Minnesota
St. Paul, Minnesota 55108
(612) 376-1369

Tom Boerner
Director, Office of Traffic Safety
Minnesota Department of Public Safety
207 Transportation Building
St. Paul, Minnesota 55155
(612) 296-7094

Jean E. Davis
Department of Public Safety
6700 Portland Avenue
Richfield, Minnesota 55423
(612) 866-5061

Nick Wasylick
Juvenile Officer/Detective
Hastings Police Department
107 W. 5th Street
Hastings, Minnesota 55033
(612) 437-4126

Dallas, Texas

A common problem facing many bicycle law enforcement programs is maintaining community interest and financial support once initial enthusiasm for the program has faded and any special funding ended. This has obviously not been a problem in Dallas, Texas (population 1,300,000), where the Bicycle Traffic Court organized in 1942 is still in operation. The Court, now referred to as the Juvenile Traffic Court, is held once or twice each month on Saturday mornings, and is staffed by members of the Dallas Police Explorer Scouts. It handles all bicycle and pedestrian violations by young persons ages 10-16, and also moving violations for those ages 10-14.

All citations to appear before the court are issued by regular Dallas police officers. When an officer stops a juvenile for a traffic violation, he already knows the date of the next Juvenile Traffic Court, and he simply issues a regular traffic citation with this date entered at the top for a mandatory court appearance. On the average about 50 young persons attend the Juvenile Traffic Court each month with about 20% of these charged for bicycle-related offenses. The remaining cases generally involve pedestrian violations and moving violations such as operating a motorcycle on the streets without a license.

At the opening of the court session the warrant officer in charge explains the purpose of the court and discusses court procedures. The actual conduct of the court is left entirely to the Explorer Scouts -- a judge, bailiff and prosecutor -- who are peers of the defendent. Sentences for first time offenders generally consist of a warning and an assignment to write a short safety theme related to the violation ticketed, such as "Why riding two on a bicycle is dangerous." Relevant safety material is supplied to the offender and the theme must be completed before leaving the courtroom. Repeat offenders are usually referred along with their parents to a counselor in the police department or other relevant agency.

The Dallas Juvenile Traffic Court demonstrates the important role that the court system can play in promoting bicycle safety. Knowing that the courts will take the bicycle offender seriously and respond by educating rather than punishing is a tremendous source of encouragement to the police officer who might otherwise be reluctant to stop a young bicyclist engaged in illegal and unsafe riding acts.

Contacts:

Dean Darnall
Warrant Officer
Dallas Municipal Court
2014 Commerce Street, Room 103
Dallas, Texas 75201
(214) 670-5355

Geelong, Victoria
Australia

The Geelong Bikeplan is a comprehensive program that includes the components of enforcement, engineering, education, and encouragement. The $1.6 million demonstration project began in 1979 with the appointment of two senior constables working full time for four months to examine enforcement alternatives. This was preceded by a Bikeplan Study started in 1976 which recommended:

- Establishment of a special police bike team in Greelong (2 men plus motor-bikes) to specialize in bicycle rider education and behavior. That team to be in addition to the normal police complement in Geelong.
- Monitoring and enforcement of car driver behavior in relation to bicycles and bicyclists' behavior.
- Bicycle registration scheme to increase security, track lost bicycles, deter theft and assist in behavior monitoring of bicycle riders (particularly those in the young age groups).
- Bicycle license system (voluntary or perhaps compulsory) setting out a qualification system and pledging obedience of the road rules.
- Equipment standards and maintenance checks. Removal of unsafe bicycles from the road.
- Inclusion in car driver tests of bicycle appreciation questions.

These areas were examined in the 1979 and 1980 field trials.

Until the start of the trial program, Geelong had devoted little effort to enforcing bicyclist violations, even though in Victoria the 44 bicyclist fatalities were over 5 percent of the 1979 total. The 12-14 age group is overrepresented in bicycle accidents.

The first enforcement trial lasted four months from February to May in 1979. The enforcement emphasis was the following:

First month - motorists
Second month - motorists (but more attention to cyclists)
Third month - equal time for motorists and cyclists
Fourth month - where needed

The police could either warn or cite motorists. Motorists also received a brochure entitled "Give Cyclists a Chance." Concerning cyclists, those under 9 years old received verbal warnings. The same was true for those 9-12 years old, and names and addresses were also taken. The option of having children over 9 years old appear in either Children's Court or Magistrate's Court was not used. Additional support programs included school and media activities, special events, and issuance of approximately 26,000 pamphlets.

At the end of this first trial, it was decided that motorists reacted more favorably to police presence than did cyclists. Of several options, it was decided that use of all uniformed police officers in the enforcement phase was preferred. Thus, in the second trial (December 1979 - March 1980), all 100 uniformed officers from the urban area of Geelong participated.

To facilitate the process, Bicycle Offense Reports were utilized as on-the-spot citations. Both violator and parent received a copy of the report. Strategies were developed for adult cyclists, juvenile cyclists, and motorcylists. Over 300 Bicycle Offense Reports were issued, and the procedure was positively received by the police. The enforcement undertaking will likely be further utilized in additional localities within the state of Victoria.

References:

Geelong Bikeplan. Bicycle Enforcement (Technical Bulletin 4) Geelong, Victoria, Australia. Author, August 1980.

Contacts:

Geelong Bikeplan
Geelong Public Officers
Cnr. Little Malop & Fenwick Steets
Geelong 3220, Victoria,
Australia
(052) 264852

III. PROGRAM ELEMENTS

The following sections focus on the key elements of a bicycle law enforcement program which must be addressed in the initial program design. These elements are all strongly interrelated, so that decisions made in any one area will impact on other program areas as well. Included here are specific enforcement procedures such as who enforces, what is enforced, and the method of adjudication, plus other program considerations such as legal issues, effectiveness evaluation and community support elements.

As the previous section reviewing past and current enforcement programs has indicated, there is no single approach to bicycle law enforcement that can be guaranteed to work for all communities. Rather, each community must implement a program specifically tailored to it. Along this line, one of the first tasks of the bicycle enforcement officer or other person responsible for the enforcement program is to evaluate the bicycle safety needs and resources of his/her community. Factors to consider are:

- The interest and receptiveness of community leaders.
- Financial support.
- Judicial and legislative support.
- Police department acceptance.
- Local press responsiveness.
- Level of bicycle usage in the community.
- Characteristics of the bicycle user population.
- Number and type of bicycle accidents.
- Prevailing attitude of motorists towards bicyclists.

Given this background, one can more confidently proceed with designing an enforcement program and working out a strategy for program implementation. The section on the Role of the Bicycle Officer further highlights this aspect of program development and presents some sample materials.

The key word in the following sections is "flexibility." The intent of this manual is not to recommend one program approach over another. Given the right situation, any of the approaches described might be utilized successfully, and again we stress that what works for one community may not work -- or even be possible -- in another community. For the purposes of this manual, we have tried to present a "smorgasbord" of approaches, along with a sufficient package of sample materials and guides, to assist the bicycle officer in making the right choices for his/her community and to ease the demands of the job.

This section begins with a discussion of the legal considerations and constraints on program development, followed by the who, what and how of bicycle law enforcement techniques. Later sections deal with program evaluation and community support needs.

Legal Issues

North Carolina

Any program of bicycle law enforcement must be conducted in accordance with state and local traffic laws and ordinances. The North Carolina Motor Vehicle Law (1) defines the bicycle as:

> A nonmotorized vehicle with two or three wheels tandem, a steering handle, one or two saddle seats, and pedals by which the vehicle is propelled (1977, c. 1123, s. 1.).

Since the bicycle is considered a vehicle, it has the same rights, duties and privileges of other (motorized) vehicles when on the road. A problem arises, however, in determining which motor vehicle laws can reasonably be applied to bicycles. Currently there are only two other references to bicycles in the N.C. Motor Vehicle Laws. These are within Section 20-129 (C), which defines lighting requirements for bicycles and Section 20-171.2, which prohibits bicycle racing on highways.

To be consistent with the latest (1979) revision of the Uniform Vehicle Code (2), the N.C. law would need to be amended to include specific guidelines for bicycle operation in other areas as well. At least for the present, however, no such legislation is scheduled for introduction to the N.C. General Assembly. However, a special task force consisting of high level representatives from the N.C. Highway Patrol, the Attorney General's Office, the League of Municipalities, the N.C. Bicycle Program and the N.C. Bicycle Committee is being convened to examine the N.C. Motor Vehicle Law and render an interpretation of its applicability to bicycles. The report by this committee will then be made available to law enforcement agencies across the state (probably by late 1982).

In the meantime, an article in the ProBike 80 Conference Proceedings by John English, Director of Research for the National Committee on Uniform Traffic Laws and Ordinances, gives an excellent discussion of key issues in the application of traffic laws and ordinances to bicycles (3). This article is reproduced here as Attachment A. Problems can arise when the bicycle is not defined as a vehicle. However, Mr. English feels that most states have a provision in their law that gives bicyclists the same rights and duties as other drivers when the bicyclist is on the roadway (and roadway is always defined in the statute). He then goes on to discuss issues associated with: (1) position on the roadway, (2) passing on the right or between lanes, (3) mandatory use of bicycle paths, (4) turns and turn signals, (5) sidewalk riding, (6) homicide by vehicle, and (7) bicycle racing.

Local Laws and Ordinances

In addition to any state laws, most municipalities have on record ordinances pertaining to bicycle operation, registration, licensing, dealer requirements, etc. These should be carefully reviewed in the earliest stages of program design to ascertain that the bicycle enforcement plan under consideration is operable within the bounds of the law. In some cases it may be necessary to modify the existing ordinances, for example, to give ticketing authority to non-comissioned police officers, such as might be required for a program utilizing college students as bike patrols. Another situation where changes may be needed is to accomodate bicycle peer courts and give them the appropriate judicial authority. Finally, if the overall bicycle safety program also incorporates some form of mandatory registration and licensing for bicycles, this must be provided for by local ordinance.

Probably the best policy here would be to discuss any proposed enforcement program with a city attorney or other legal representative. Then, if changes are needed in the municipal ordinances, this person might be asked to help in the drafting and passing of these changes. Along this line, the importance of establishing a good working relationship with the mayor's office, members of the city council and other community leaders cannot be overemphasized. Even if no changes to the local bicycle ordinances are needed, the support of these persons is vital to the success of the program. They should be given an opportunity to provide input to the program and be kept up to date on its development. They should also be asked to participate in any media events designed to gain public approval of the program.

To assist local governments in establishing a strong legal basis for the safe operation of bicycles on the roadway, the Bicycle Manufacturers Association of America, Inc., has developed a model bicycle ordinance (see Attachment B). Another useful guide would be the section of the Uniform Vehicle Code dealing with bicycles, included here as Attachment C. Attachment D is a bicycle ordinance excerpt taken from a Wisconsin pedestrian and bicycle safety reference. Attachment E for this section contains copies of bicycle ordinances from the cities of Des Plaines, Illinois; Cranford, New Jersey; Davis, California; Concord California; and "Yourtown, U.S.A."

The last attachment (F) in this group is taken from the draft copy of one of a series of reports prepared for the National Highway Traffic Safety Administration by Dunlap and Associates (4). This particular report deals with the development of prototype regulations which could be enacted within a state or municipality. The regulations essentially derive from the bicycle accident typology developed by Cross and Fisher. The NHTSA prefers to field test prototype ordinances like these to determine their levels of effectiveness before promoting widespread usage. Such activity may take place in future research efforts. For now, the prototype regulations are presented as candidates for consideration by a city undertaking a bicycle law enforcement program, and some may possibly be considered controversial. However, the full draft report covers the underlying rationale and accident problem for each. The complete list of regulations is the following:

- Model Bicyclist Conspicuity Law.
- Model Law for Bicyclist Position on the Highway.
- Model Highway Entry Law.
- Model Minimum Age Law for Bicyclists.
- Model Driveway Parking Ordinance.
- Model Law to Remove Visual Obstructions.
- Model Regulation to Prohibit Riding Bicycles on Sidewalks.
- Model Bicycle Safety Patrol and Violator Disposition Ordinance.

References

1. North Carolina Division of Motor Vehicles. Motor Vehicle Laws of North Carolina. Charlottesville, Virginia: The Michie Company, 1980.

2. National Committee on Uniform Traffic Laws and Ordinances. Uniform Vehicle Code and Model Traffic Ordinance, 1979 Supplement.

3. English, J. Current Issues in the Application of Traffic Laws and Ordinances to Bicycles. Proceedings of the First National Conference for Bicycle Program Specialists (PRO BIKE 80) coordinated by the Bicycle Federation, Washington, D.C., 1981, pp. 54-58.

4. Blomberg, R.D. and Hale, A. Identification and Development of Countermeasures for Bicyclist/Motor Vehicle Problem Types. (National Highway Traffic Safety Administration Contract No. DOT-HS-7-01726, Preliminary Draft). Darien, Connecticut: Dunlap and Associates, Inc. August 1981.

LEGAL ISSUES

ATTACHMENT A

"CURRENT ISSUES IN THE APPLICATION OF TRAFFIC LAWS AND ORDINANCES TO BICYCLES"

by

John English

CURRENT ISSUES IN THE APPLICATION OF TRAFFIC LAWS AND ORDINANCES TO BICYCLES*

JOHN ENGLISH

Legal Status of a Bicycle

Is a bicycle a "vehicle" as that term is defined in state laws? Does a bicycle driver have the same rights and duties as the driver of a vehicle?

In most states, the answer to these questions is negative. Most states define the term "vehicle" to include devices in or on which a person or property may be transported on the highway, but they specifically exclude devices which are moved by human power. Hence in most states, a bicycle is not a vehicle. Because of that, the rights and duties applicable to the driver of a vehicle are not directly applicable to the bicyclist.

Generally, however, the states have a second law which applies these rights and duties to the bicyclist indirectly and to a limited extent. Such laws usually provide that every person riding a bicycle upon a roadway must be granted all the rights and is subject to all the duties applicable to the driver of a vehicle, except any such rights and duties which by their nature can have no application.

This gives the bicyclist the same rights and duties as other drivers, but only when the bicyclist is on the roadway. The term "roadway" is always defined. It includes only that part of the highway which is designed and ordinarily used for vehicular travel (i.e., the paved portion, except for the shoulder). The roadway does not include some areas of the highway where bicycles are frequently ridden, such as the shoulder, the sidewalk, or a bicycle path located within the highway right-of-way. The term "highway" includes the entire width of the way, from one property line to the other. Drivers of vehicles other than bicycles have rights and duties under the traffic laws which apply anywhere on the highway, not just on the roadway; they also have a few rights and duties which apply everywhere, both on and off the highways. When a bicycle is ridden on the shoulder, or on the sidewalk, or on any other non-roadway part of the highway, the bicyclist does not have the same rights and duties as the driver of a vehicle, in most states.

The Uniform Vehicle Code (UVC) has been amended to make the rights and duties of the driver of a vehicle applicable both directly and indirectly to the bicyclist. The UVC defines "vehicle" so as to include a bicycle. See UVC § 1-184. The UVC has also retained the provision described above which indirectly applies the rights and duties, but the current UVC version uses the term "highway" instead of "roadway." See UVC § 11-1202.

Position on the Roadway

In most states the law requires a bicyclist on the roadway to keep as close as practicable to the righthand curb or edge of the roadway. This gives the bicyclist some general guidance in selecting a roadway position, but it certainly is not definitive. The bicyclist must consider what is possible, safe and reasonable under the circumstances. S/he must also consider the rights afforded and duties imposed under other laws. The bicyclist is required by other law, for example, to move away from the curb in order to avoid violation of a lane restriction such as a right-turn-only lane. Also, the bicyclist is required to move to a left-turn lane when approaching a left turn. We think it is also clear that the bicyclist may move away from the right curb as far as necessary for safety when encountering hazards such as parked cars, pot holes, loose gravel, or narrow lanes.

---

*Source: PRO BIKE 80 Proceedings, 1981.

In some states there have been problems with this law because of differences of opinion (generally between a bicyclist and a police officer) as to just what position is possible, safe and reasonable. Some people misunderstand the provision as requiring the bicyclist to stay next to the right curb at all times.

Due to this concern, the UVC and some state laws (California, for example), have been amended to more specifically define the conditions under which a bicyclist is permitted to move out away from the curb. See UVC § 11-1205. One advantage of this approach is that hazards well recognized by bicyclists but not well understood by motorists (including police officers) can be clearly stated in the law. One disadvantage of the approach is the potential for omitting some circumstance which should be covered. It is extremely difficult to write a law which incorporates and weighs appropriately all those factors which a skillful bicyclist considers in selecting a safe and proper roadway position. Have we omitted any?

Passing on the Right or Between Lanes

The ability of the bicycle to slip through jammed-up traffic is perhaps a major aspect of its utility as an urban transportation vehicle. Bicyclists frequently pass to the right, going to the head of a line of cars waiting at a traffic light. Some will also pass to the left, cutting between two lines of stopped or slowly-moving vehicles. Both of these maneuvers are quite dangerous, however, due to motorists suddenly making right turns, changing lanes, or opening vehicle doors. Motorists simply do not expect any traffic to be moving in that small space between the vehicle and the curb, or between the two vehicles.

The UVC and the laws of most states do not directly address these issues. There are some provisions which are applicable, but they do not give a definitive answer to whether the bicyclist is or is not permitted to pass as described above. For example, if a bicyclist passing between two lines of vehicles is weaving back and forth across a lane line, s/he is probably violating a law which requires a driver to keep his vehicle within a single lane, changing lanes only with caution and after signaling. See UVC §§ 11-309(a) and 11-604(a). Also, passing between two lines of vehicles might be considered to be illegal as passing at an unsafe distance. See UVC § 11-303(a). The UVC permits vehicles to pass on the right when there is sufficient roadway width for two or more lines of vehicles in the appropriate direction. See UVC § 11-304. This would permit a bicyclist to pass on the right under circumstances where a wider vehicle would not be allowed to do so. The same UVC section prohibits the driver of any vehicle from driving off the roadway (onto the shoulder) in order to pass on the right. Application of that restriction to a bicycle is absurd, but it does apply.

Although the laws do not clearly prohibit or permit the passing maneuvers described above, they do impose on the passing driver the duty to pass only when it can be done with safety. The bicyclist who passes to the left or right of stopped or slowly-moving traffic assumes the risk involved in the maneuver. It is very likely that the bicyclist would be considered at fault, or partially at fault, in any accident during such a maneuver.

Mandatory Use of Bicycle Paths

The UVC and the laws of many states specify that whenever a usable path for bicycles has been provided adjacent to the roadway, bicyclists must use the path and may not use the roadway. See UVC § 11-1205.1(b). Attempts by bicyclists to have this unpopular provision removed from the UVC in recent years have failed on very close votes. Bicyclists have objected to the provision for many reasons, but primarily because such paths are frequently not designed and maintained to the same standards as the adjacent roadway, and because such paths subject bicyclists to increased danger at driveways and intersections.

There is also some doubt as to the precise meaning of the law. When is a path considered usable, and whose judgment determines this issue. Does adjacent mean simply nearby, or does it necessarily mean the path must be contiguous to the roadway.

Turns and Turn Signals

Bicyclists on the roadway are required to make turns just as motorists do. Bicyclists have the additional option on a left turn of getting off the roadway and walking or riding the bicycle around the intersection, using the sidewalks and crosswalks just as a pedestrian would do.

Because the vehicle-type option is unnecessarily burdensome, a third left turn option has been made available for bicyclists under the UVC. It allows the bicyclist to follow essentially the same course as the pedestrian-type option, but to remain in the roadway while doing it. See UVC § UVC 11-1207. In most states this third left turn option is currently illegal.

As to turn signal requirements, the UVC has been amended to specify that a hand signal need not be given continuously for the last 100 feet before the turn if the hand is needed in the control and operation of the bicycle. See UVC § 11-1208. Most states still require a continuous signal in spite of the fact that the bicyclist needs to have his hand on the brakes at the same time the signal is required.

Amending the UVC to allow bicyclists to signal a right turn with the right hand and arm (instead of the left) has been discussed but rejected because only one state is known to permit the practice, and the change does not seem really necessary.

Sidewalk Riding

There are two issues involved in sidewalk riding. The first is whether riding on the sidewalk should be permitted. It is quite clear that at some locations, at least, sidewalk riding should be prohibited. Factors to consider include the width of the sidewalk, the volume of pedestrian traffic, the number of driveways and building entrances, and the sight distances for those driveways and entrances. On the other hand, prohibiting all sidewalk riding seems unjustified. There are many miles of seldom-used sidewalks, especially in residential areas. There is no need to exclude bicycles from all such sidewalks. To do so would work a hardship, especially on children.

The UVC generally permits sidewalk riding, but allows the traffic engineer to prohibit it at any particular location by putting up signs. See UVC § 11-1209. The same section requires a bicyclist on a sidewalk to yield to pedestrians, and to give an audible signal before passing.

The second issue in sidewalk riding is the status of the bicycle ridden on the sidewalk. A bicyclist while riding on the sidewalk is not a pedestrian. We've already noted that in most states the rights and duties of a vehicle driver apply to the bicyclist only when on the roadway. In most states, the bicyclist riding on the sidewalk is very nearly in a statutory vacuum. There may be a section requiring the bicyclist to yield to pedestrians on the sidewalk; in most states, that will be the only statutory provision applicable to the bicyclist riding on the sidewalk. Consider some of the consequences. The driver of a vehicle crossing a sidewalk has a duty to yield the right of way to a pedestrian, but a bicyclist, while riding, is not a pedestrian and does not enjoy that same legal protection. If a bicyclist riding on the sidewalk faces a green light (vehicle signal) and Don't Walk (pedestrian signal) at the same time, with which should s/he comply? Actually, in most states, the bicyclist is not required to comply with either.

The UVC has addressed this problem by providing that whenever a person is propelling a bicycle (or any other human-powered vehicle) on a sidewalk or crosswalk, regardless of whether riding or walking the bicycle, that person has all the rights and duties applicable to a pedestrian under the same circumstances. See UVC § 11-1209(c). Thus under the UVC the motorist described above would be required to yield to the bicyclist, and the bicyclist at the intersection would be required to comply with the pedestrians' Don't Walk signal, without regard to whether the bicyclist is walking or riding on the sidewalk.

For the most part, state laws are far behind the UVC in dealing with these two issues, particularly the second one.

Homicide by Vehicle

This may strike you as an unusual bicycle issue. It is an issue because of the bicyclist's extraordinary vulnerability to fatal injury, and because of the inability to effectively prosecute such homicides in many states.

A person is guilty of homicide by vehicle if he unlawfully and unintentionally causes the death of another person while violating any traffic law, if the violation is the proximate cause of death. See UVC § 11-903. Most states do not have a homicide by vehicle law.

Homicide by vehicle is a lesser offense than involuntary manslaughter. Generally, involuntary manslaughter charges can be sustained only where the proximate cause of death is negligence which is so gross, wanton or culpable as to show a reckless disregard for human life. The courts often require evidence of intoxication or grossly excessive speed or something similar in order to convict of involuntary manslaughter. Homicide by vehicle, on the other hand, only requires simple negligence, the violation of a traffic law.

The difference is most apparent, as is the need for the lesser offense to be in the law, when considering a recent bicycle fatality in the District of Columbia. In that case, the driver of a dump truck made a left turn, failing to yield the right of way to an oncoming bicyclist as required by law. The truck struck the bicyclist, causing her immediate death. This is a clear case of homicide by vehicle which could be effectively prosecuted under a state law like UVC § 11-903. But in many states the homicide would not be prosecuted. At most the dump truck driver would be subject to a small fine for failure to yield the right of way. The reason is that in the absence of a homicide by vehicle law, the state can only prosecute the homicide as involuntary manslaughter. The failure of the truck driver to see the bicyclist and to yield is merely simple negligence. It does not constitute the kind of gross negligence which is required to sustain a conviction of involuntary manslaughter.

Bicycle Racing

Organized bicycle road racing events are commonly held. They are a necessary element to the training of our athletes for participation in national and international bicycle racing competitions.

Bicycle racing events held on a highway are illegal in some states. The UVC generally prohibits bicycle racing on the highway, but makes it lawful if the event has the approval of the state and/or local authorities having jurisdiction over the highway. Such approval can be granted only under conditions which assure reasonable safety for all participants, spectators, and highway users. See UVC § 11-1211.

Perhaps an even more serious problem is that the laws of most states do not make any provision for exemption from compliance with traffic laws for persons participating in sanctioned racing events. Thus, for example, race participants are required to give hand signals and to be in the proper lane position for making a turn. Those requirements are inconsistent with the high-speed turns involved in racing, but they are legal requirements, and racers are not exempt from compliance. The same is true, of course, with regard to stop signs and other legal requirements. The racer who ignores the traffic laws during a race and who becomes involved in an accident will find his legal status seriously jeopardized because of the violations.

Most racers probably assume that if a race is held with the approval of the local police, the traffic laws will not apply. This is not necessarily true. If the highway is closed to public use during the race, it is no longer a highway and the traffic laws would not apply. But if the highway remains open, the police generally do not have any authority to waive the application of traffic laws. The UVC was amended in 1975 to add this kind of authority, but most state laws do not have such a provision. See UVC § 11-1211(c).

LEGAL ISSUES

ATTACHMENT B

BICYCLE MANUFACTURERS ASSOCIATION OF AMERICA MODEL BICYCLE ORDINANCE

Model Ordinance*

Section 1 – Registration of Bicycles

It is hereby ordained by the ______________________ of the ______ of ________

Section 1. (a) It shall be unlawful for any person residing in the ____________ of ______________ to drive or use a bicycle without first obtaining from the police department a license therefore as prescribed in Section 1 of this ordinance.

(b) No person, firm, partnership or corporation shall maintain, operate or conduct a business of buying or selling new or secondhand bicycles within the limits of the ____________ of ____________ without first obtaining therefore a license from the police department as prescribed in Section 9 sub-division (b) of this ordinance.

(c) From and after the passage of this ordinance it shall be unlawful for any person, firm, partnership or corporation to maintain, operate or conduct a bicycle renting agency within the limits of the ____________________ of ________________ without first obtaining a license from the police department as herein prescribed for in Section 3 of this ordinance.

Section 2 – Issuance of License

Section 2. The police department is hereby authorized and directed to issue upon written application, to residents of the ____________ of ____________ bicycle licenses that shall be effective for one year, and all licenses shall be dated ______________ of the year of issue, which license when issued, shall entitle the licensee to operate such bicycle or bicycles for which said license shall have been issued upon all the streets and public highways of the ______________ of ____________ and upon the sidewalks of any streets or highways where riding is permitted by the police department.

Section 3 – License Plates

Section 3. The police department shall provide each year a license plate (or tag or decal), together with registration certificate cards stamped in numerical order beginning with the number one; and shall indicate the year for which they were issued and letters indicating that they were issued by the ________________ of ______________ The license shall be suitable for attachment to the bicycle at a location where it will always be plainly visible, and it shall also be the duty of the police department to attach the license to the bicycle, or supervise its attachment in such manner as will prevent removal. The police department shall also provide and issue a registration card – with numbers corresponding with the numbers on the license.

*Reprinted with permission of the Bicycle Manufacturers Association of America, Inc.

*Source: National Safety Council, Indiana Bicycle Safety Program Guide

BEST COPY AVAILABLE

The issuance of the registration card and license to the licensee shall be after the collection of the registration fee for the license as provided for in sub-division (c) of Section 9. Funds collected by the police department for the licenses provided for in this ordinance shall be returned by the police department as collected and under conditions to be determined by the treasurer of the registration fund. The license shall remain attached to the bicycle during the valid term of such license. The police department shall keep a record of the date of issue of each license.

Section 4—Dealers and Rental Agencies

Section 4. All persons, firms, partnerships or corporations engaged in the business of buying or selling new or secondhand bicycles are hereby required to make regular reports to the police department on forms to be furnished by the police department, giving a list of all purchases and sales made by said dealer, as well as the name and address of all persons, firms, partnerships and corporations from whom said bicycles are purchased and to whom sold, a description of each bicycle purchased or sold and the serial number thereof, and in the case of a secondhand bicycle bought from an individual or taken in trade from a person buying a new bicycle, or a secondhand bicycle taken from a dealer's stock, the number of the license thereon if any.

Section 5—Transfer of License

Section 5. It shall be the duty of any person who sells or transfers ownership of any bicycle to report such sale or transfer by returning to the police department the registration card issued to such person as license thereof, together with the name of the person and his or her address to whom the bicycle was sold or transferred, and such report shall be made within two days of the date of sale or transfer thereof. It shall be the duty of the person who made the purchase or the transferee of said bicycle to apply to the police department for registration thereof within two days of the date of said sale or transfer.

Section 6—Altering License

Section 6. It shall be unlawful for any person, firm, partnership or corporation to willfully, maliciously remove, destroy, mutilate or alter the number of any bicycle frame licensed pursuant to this ordinance. It shall also be unlawful for any person, firm, partnership or corporation to remove, destroy, mutilate or alter any license plate, seal or registration card during the time in which said license plate, seal or registration card is operative, provided, however, that nothing in this ordinance shall prohibit the police department from stamping on the frame of bicycles on which no serial number can be found or on which said number is illegible for identification purposes. The police department may also stamp upon the frame of any bicycle registered a number which shall be the secret number of the police department, if so required, in the administration of this ordinance to prevent bicycle larceny and recover stolen bikes.

Section 7—Rental Practices

Section 7. No person, firm, partnership or corporation engaged in the business of renting bicycles for hire shall rent a bicycle to a minor unless the written consent of the parents or guardian is provided. The renting agency must keep the written consent on file for police inspection.

Section 8—Conditions of License

Section 8. The following rules and regulations shall be observed in the operation of a bicycle on the streets and public places of______________________________:

(a) Every person operating a bicycle shall at all times operate said bicycle with due regard for the safety of other persons and vehicles lawfully upon the streets, highways, parkways and public places, as well as for his own or her safety, and shall at all times and under all conditions yield the right-of-way to pedestrians on the streets, highways, parkways, public places and on the crosswalks.

(b) Every person operating a bicycle shall comply with all the vehicle traffic laws, except where such laws, by their nature, do not apply to bicycles, and all vehicle traffic signs and signals erected for the regulation of traffic.

(c) It shall be unlawful for any person to operate a bicycle upon the streets, highways,

BEST COPY AVAILABLE

parkways and public places of the______________ of______________during the period of one hour after sunset to one hour before sunrise unless such bicycle is equipped with a front light, casting a beam of white light in front of such bicycle visible for not less than five hundred feet, also a rear signal, i.e., a state-approved reflector or red light visible for not less than three hundred feet.

(d) It shall be unlawful to operate a bicycle upon the streets, highways, parkways and public places of the______________of______________that is not equipped with adequate brakes, lights and warning signal, all of which are in proper working order during all of the time of the operation of such bicycle that has the approval and has passed police inspection.

(e) It shall be the duty of all persons operating a bicycle to drive single file, in a straight line and as near the right-hand curb as possible, on all main highways and thoroughfares and in central business sections and when driving on other streets must not drive more than two abreast.

(f) Before turning or changing the direction of any bicycle upon any street, highway, parkway or public place, it shall be the duty of the bicycle driver to give a signal by the extension of the hand to indicate the direction it is the intention to proceed.

(g) It shall be unlawful for any person operating a bicycle upon any street, highway, parkway or public place to attach himself or herself to any other moving vehicle.

(h) It shall be unlawful for any person operating a bicycle equipped for carrying only the driver to carry another person on the front or rear frame or handle bar of a bicycle.

(i) It shall be unlawful for any person operating a bicycle to engage in fancy or trick driving without maintaining full control of such bicycle, and keeping both hands on the handle bar except when necessary to signal.

Section 9—Issuance of License

Section 9. The following fees shall be collected by the police department for the various types of licenses provided under this ordinance:

(a) The license fee to be paid for each bicycle shall be____________for the first year or any part of the first year for which such license shall be issued, it being understood that all licenses issued under this ordinance expire on the last day of the month of ______________________, unless that date shall happen on a Sunday in which event the license shall be dated on the first following legal date. In the case where the transfer of bicycle ownership is made in the manner prescribed in this ordinance, the fee for the transfer of said license shall be in the sum of______________________. Upon the loss of a license and upon evidence satisfactory of said loss, a new license shall be issued upon payment of______________________________.

(b) Each person, firm, partnership or corporation engaged in the business of buying and selling new and secondhand bicycles shall be required to have a license issued by the police department. Said license shall be effective for one year. Any person, firm, partnership or corporation engaged in the business of renting bicycles for public hire shall procure a license for their bicycle rental agency.

(c) Each person, firm, partnership or corporation engaged in the business of renting bicycles for public hire, in addition to the license fee prescribed for each bicycle, as provided for in sub-division (a) of this ordinance, shall be required to have a license to operate a bicycle rental agency. All bicycles owned by said agency offered for public hire shall be registered in the name of said agency, but a record of the name, address and age of such person hiring a bicycle shall be kept on file for the inspection of the police department. License plates and registration cards issued to a bicycle rental agency shall contain the letters "RA" indicating they are issued to a bicycle rental agency.

Section 10—Penalty

Section 10. Any person, sixteen years of age and under, who violates any of the provisions of this ordinance relating to the vehicle traffic laws or the bicycle safe driving rules and regulations and the official police instructions for the safe operation of a bicycle, shall be, for the first offense, reprimanded in writing by the police department, addressed to the parents or guardian of the offender, stating the nature of the violation and a warning that a repetition of the violation—or any other violation—must be prevented by the parents or guardian or the offender's registration certificate will be suspended for a period of time at the discretion of the police department and during that period of time the offender cannot drive his or her bicycle on the streets. On the

BEST COPY AVAILABLE

second offense the offender will be summoned to appear at police headquarters with his or her bicycle, accompanied by a parent or guardian, and after a hearing on the violation, if in the discretion of the chief of police, or his representative, it is decided to punish the offender for the violation, the offender's bicycle may be impounded for a period of time not to exceed__________days at the discretion of the chief of police or his representative – with the approval if possible of the parent or guardian – but the decision of the chief of police shall prevail and the bicycle shall be impounded. It is ordained that no violation of this ordinance, relating to the vehicle traffic laws or the safe bicycle driving rules and the official police instructions for the safe operation of a bicycle, as prescribed in Section 8 of this ordinance, shall be considered a criminal offense or made a matter of a court record where the offender is sixteen years of age or under. Any person over sixteen years of age or firm or partnership violating any of the provisions of this ordinance shall, upon conviction thereof, in addition to the suspension or revocation of such license as herein mentioned, be punished by the payment of a fine not to exceed __________dollars, or by imprisonment for a term not to exceed days/months or both fine and imprisonment; and any corporation violating any of the provisions of this ordinance, upon conviction thereof, will be subject to a fine not to exceed __________dollars which may be recovered by an action for debt.

Section 11—Inspection

Section 11. The chief of police, or his designated representatives, shall inspect each bicycle offered for registration and shall also examine the driving qualifications of the applicant as to his or her knowledge of the vehicle traffic laws of the state applying to bicycles, traffic signs and signals, as set forth in Section 8 of this ordinance, and if the applicant's riding qualifications, knowledge of the vehicle laws of the state applying to bicycles, and the bicycle safe driving rules and regulations and the official police instructions for the safe operation of a bicycle are not satisfactory, or the bicycle is not in good drivable condition and properly equipped as provided for in this ordinance, registration of the applicant's bicycle must not be issued until all requirements are fulfilled.

Section 12—Qualifications of Dealers

Section 12. In the matter of the issuance of busisness licenses for the dealers in secondhand bicycles and the conduct and operation of a bicycle rental agency, the chief of police must be satisfied that applicants for such licenses are of good character and financially responsible.

Section 13—Impounding

Section 13. Whenever any bicycle shall be impounded for violations of the provisions of this ordinance it shall be surrendered at the expiration of the impounded period to the parents or the guardian of the offender on the payment of a charge for storage, at the discretion of the chief of police, but if a charge is made it shall not exceed ______ ______ cents/dollars. In the case of the seizure of a bicycle because it has been found in the possession of a person, firm, partnership or corporation not the legal owner thereof, and the bicycle is not reclaimed by the legal owner thereof, it shall be sold at public auction – after the expiration of ____________ days from the date of seizure. Notice containing a description of the bicycle shall be published in a newspaper circulating in the ____________ of ____________ at least one week prior to the date of the sale. The proceeds of the sale shall be remitted to the treasurer of the registration fund.

Section 14—Definition of Bicycle

Section 14. The term "Bicycle" as used in this ordinance shall mean a device having two wheels, with tires sixteen inches or more in diameter, connected by a frame of metal or wood and arranged to be propelled by human power. This definition does not apply to toy bicycles or velocipedes.

As time progresses, portions of this Ordinance may be supplanted by recommendations included in the Uniform Vehicle Code.

BEST COPY AVAILABLE

LEGAL ISSUES

ATTACHMENT C

BICYCLE SECTION OF THE UNIFORM VEHICLE CODE

ARTICLE IXX--OPERATION OF BICYCLES, OTHER HUMAN-POWERED VEHICLES, AND MOPEDS (REVISED, 1979.)*

§ 11-1201--Effect of regulations

(c) Subsection (c) was deleted in 1975.

§ 11-1202-Traffic laws apply to persons on bicycles and other human powered vehicles

Every person propelling a vehicle by human power or riding a bicycle shall have all of the rights and all of the duties applicable to the driver of any other vehicle under chapters 10 and 11, except as to special regulations in this article and except as to those provisions which by their nature can have no application. (REVISED, 1975.)

§ 11-1203--Riding on bicycles

(a) Deleted in 1975.
(b) No bicycle shall be used to carry more persons at one time than the number for which it is designed or equipped, except that an adult rider may carry a child securely attached to his person in a back pack or sling. (REVISED, 1975.)

§ 11-1204--Clinging to vehicles

(a) No person riding upon any bicycle, coaster, roller skates, sled or toy vehicle shall attach the same or himself to any (streetcar or) vehicle upon a roadway. (RELETTERED, 1975.)
(b) This section shall not prohibit attaching a bicycle trailer or bicycle semitrailer to a bicycle if that trailer or seimtrailer has been designed for such attachment. (NEW SUBSECTION, 1975.)

§ 11-1205--Position on roadway

(a) Any person operating a bicycle or a moped upon a roadway at less than the normal speed of traffic at the time and place and under the conditions then existing shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:
(1) When overtaking and passing another bicycle or vehicle proceeding in the same direction.
(2) When preparing for a left turn at an intersection or into a private road or driveway.
(3) When reasonably necessary to avoid conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes that make it unsafe to continue along the right-hand curb or edge. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and vehicle to travel safely side by side within the lane.

---

*Source: National Committee on Uniform Traffic Laws and Ordinances Uniform Vehicle Code and Model Traffic Ordinance, 1979 Supplement.

(b) Any person operating a bicycle or a moped upon a one-way highway with two or more marked traffic lanes may ride as near the left-hand curb or edge of such roadway as practicable. (REVISED, 1979.)

§ 11-1205.1--Riding two abreast and use of bicycle paths

(a) Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. Persons riding two abreast shall not impede the normal and reasonable movement of traffic and, on a laned roadway, shall ride within a single lane. (REVISED, 1975; FORMERLY § 11-1205(b).)

(b) Wherever a usable path for bicycles has been provided adjacent to a roadway, bicycle riders shall use such path and shall not use the roadway. (FORMERLY § 11-1205(c).)

§ 11-1206--Carring articles

No person operating a bicycle shall carry any package, bundle or article which prevents the use of both hands in the control and operation of the bicycle. A person operating a bicycle shall keep at least one hand on the handlebars at all times. (REVISED, 1975.)

§ 11-1207 - Lamps and other equipment on bicycles

This section was revised and moved in 1975 to UVC Chapter 12 commencing at section 12-701.

§ 11-1207--Left turns

(a) A person riding a bicycle or a moped intending to turn left shall follow a course described in § 11-601 or in subsection (b).

(b) A person riding a bicycle or a moped intending to turn left shall approach the turn as close as practicable to the right curb or edge of the roadway. After proceeding across the intersection roadway, the turn shall be made as close as practicable to the curb or edge of the roadway on the far side of the intersection. After turning, the bicyclist or moped driver shall comply with any official traffic control device or police officer regulating traffic on the highway along which he intends to proceed.

(c) Notwithstanding the foregoing provisions, the state highway commission and local authorities in their respective jurisdictions may cause official traffic-control devices to be placed and thereby require and direct that a specific course be traveled by turning bicycles or mopeds, and when such devices are so placed, no person shall turn a bicycle or a moped other than as directed and required by such devices. (NEW SECTION, 1975; REVISED, 1979.)

§ 11-1208--Turn and stop signals

(a) Except as provided in this section, a person riding a bicycle shall comply with § 11-604.

(b) A signal of intention to turn right or left when required shall be given continuously during not less than the last 100 feet traveled by the bicycle before turning, and shall be given while the bicycle is stopped waiting to turn. A signal by hand and arm need not be given continuously if the hand is needed in the control or operation of the bicycle.

§ 11-1209--Bicycles and human powered vehicles on sidewalks

(a) A person propelling a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall yield the right of way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian.

(b) A person shall not ride a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, where such use of bicycles is prohibited by official traffic-control devices.

(c) A person propelling a vehicle by human power upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall have all the rights and duties applicable to a pedestrian under the same circumstances. (NEW SECTION, 1975.)

§ 11-1210--Bicycle parking

(a) A person may park a bicycle on a sidewalk unless prohibited or restricted by an official traffic control device.

(b) A bicycle parked on a sidewalk shall not impede the normal and reasonable movement of pedestrian or other traffic.

(c) A bicycle may be parked on the roadway at any angle to the curb or edge of the roadway at any location where parking is allowed.

(d) A bicycle may be parked on the roadway abreast of another bicycle or bicycles near the side of the roadway at any location where parking is allowed.

(e) A person shall not park a bicycle on a roadway in such a manner as to obstruct the movement of a legally parked motor vehicle.

(f) In all other respects, bicycles parked anywhere on a highway shall conform with the provisions of article 10 regulating the parking of vehicles. (NEW SECTION, 1975.)

§ 11-1211--Bicycle racing

(a) Bicycle racing on the highways is prohibited by § 11-808 except as authorized in this section.

(b) Bicycle racing on a highway shall not be unlawful when a racing event has been approved by state or local authorities on any highway under their respective jurisdictions. Approval of bicycle highway racing events shall be granted only under conditions which assure reasonable safety for all race participants, spectators and other highway users, and which prevent unreasonable interference with traffic flow which would seriously inconvenience other highway users.

(c) By agreement with the approving authority, participants in an approved bicycle highway racing event may be exempted from compliance with any traffic laws otherwise applicable thereto, provided that traffic control is adequate to assure the safety of all highway users. (NEW SECTION, 1975.)

§ 11-1213--Mopeds in bicycle lanes

Upon any roadway where motor vehicles are permitted, a person may drive a moped in any lane designated for the use of bicycles. (NEW, 1979.)

LEGAL ISSUES

ATTACHMENT D

WISCONSIN BICYCLE ORDINANCE

*Source: Hurley and Thompson, Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities, 1973.

BICYCLE ORDINANCE*

These are suggested, not model, ordinances. They constitute substantive suggestions only. The form of any ordinance adopted should first be reviewed by a municipal attorney to make sure that they are consistent with state law.

Section 1. Definitions

a. Bicycle: means every device propelled by the feet acting upon pedals and having wheels any 2 of which are not less than 14 inches in diameter.

b. Bicycle Establishment/Bicycle Dealer: any business operated by any person, partnership, association or corporation on wherein used bicycles or bicycle parts are purchased, sold, exchanged, bartered, repaired, remodeled, dismantled or junked.

c. Bicycle Lane: means that portion of a roadway set aside by the governing body of any city, town, village or county for the exclusive use of bicycles or other modes of travel where permitted under s. 349.23 (2) (a), and so designated by appropriate signs and markings. "Bicycle way" means any path or sidewalk or portion thereof designated for the use of bicycles by the governing body of any city, town, village or county.

d. Bike Route: means any bicycle lane, bicycle way or highway which has been duly designated by the governing body of any city, town, village or county and which is identified by appropriate signs and markings.

e. Carrier: any device attached to the bicycle designed for carrying articles.

f. Curb: the lateral boundaries of that portion of a street designed for the use of vehicles, whether marked by a curb or not.

g. Driver/Operator: every person who drives or is in actual physical control of a vehicle.

h. Mini Bike: a two-wheeled motorized vehicle with less than 20-inch wheels usually designed for trails and off-street use.

i. Motor Bike: a vehicle of the bicycle or tricycle type propelled by a motor.

j. Motor Vehicle: every vehicle which is self-propelled and every vehicle which is propelled by electric power obtained from overhead trolley wires, but not operated upon rails.

k. Owner: a person, other than a lienholder, having the property in or title to a vehicle. The term includes a person entitled to the use and possession of a vehicle subject to a security interest in another person, but excludes a lessee under a lease not intended as security.

l. Pedestrian: any person afoot.

m. Reflector: any device constructed of metal and/or glass which will be visible from all distances within 50 feet to 300 feet directly in front of a motor vehicle at night displaying lawfully lighted headlights, such device to be so constructed as to show a red color when struck by motor vehicle lights as above stated, such device to be affixed to the rear of the bicycle at any point on the frame or mudguard at a height between axis of the wheel and the bottom of the rider's seat.

n. Registration Tag: a metal plate or sticker indicating that a bicycle is registered.

o. Right of Way: the right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian approaching under such circumstances of direction, speed and proximity as to give rise to danger of collision unless one grants precedence to the other.

p. Sidewalk: that portion of a street between the curb lines, or the lateral lines of a roadway, and the adjacent property lines, intended for use by pedestrians.

q. Street/Highway: the entire width between the boundary lines or every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel.

r. Vehicle: every device in, upon or by which any person or property is or may be transported or drawn upon a highway, excepting devices used exclusively upon stationary rails or tracks.

Section 2. Registration Required

a. No person, who resides within (Community Name), shall ride or propel a bicycle on any street or upon any public path set aside for the exclusive use of bicycles unless such bicycle has been registered and a registration plate and/or sticker is attached thereto as provided herein.

b. At the time of the issuances of any such registration plate as herein provided, the applicant shall pay a registration fee. Registration tags issued in accordance with this section shall be attached to the bicycle immediately after issuance.

c. This section shall apply to all residents of (Community Name) and to such nonresidents who operate bicycles upon the streets of (Community Name) habitually or frequently. It shall not apply to casual travelers or tourists passing through (Community Name) on their bicycles.

d. All bicycles must be registered within 10 days of purchase.

e. No person shall intentionally take or ride a bicycle without the consent of the owner.

Section 3. Application for Bicycle Registration

a. Application for a bicycle registration plate and/or sticker shall be made upon a form provided by (Community Name) and shall be made to the Chief of Police. A annual registration fee of _______ shall be paid to (Community Name) before each registration or renewal thereof is granted.

Section 4. Inspection of Bicycle

a. The licensing authority, or any officer assigned such responsibility, shall inspect each bicycle before registering the same and shall refuse registration for any bicycle which he determines to be in unsafe mechanical condition.

Section 5. Issuance of License

a. The licensing authority, or other designated authority, upon receiving proper application therefore, is authorized to issue a bicycle registration which shall be valid through May 31.

b. The licensing authority shall not issue a registration for any bicycle when he knows or has reasonable ground to believe that the applicant is not the owner of or entitled to the possession of such bicycle.

c. The licensing authority shall keep a record of the number of each registration, the date issued, the name and address of the person to whom issued, the number on the frame of the bicycle for which issued, and a record of all bicycle registration fees collected by him. Registration forms and registration plates and/or stickers shall be serially numbered to coincide with each other.

d. If a bicycle does not have a serial number and if proof of ownership can be proven, the police department shall assign one to said bicycle.

Section 6. Attachment of Registration Plate & Sticker

a. The licensing authority, upon issuing a bicycle registration, shall also issue a registration plate and/or sticker bearing the registration number assigned to the bicycle, the name of the city, the calendar year for which issued and the expiration date thereof.

b. Such registration plate shall be firmly attached to the rear license holder or frame of the bicycle for which issued in such position as to be plainly visible from the rear. The registration sticker shall be placed on the rear fender in such a position as to be plainly visible from the rear or on the seat tube directly below the seat in such a manner to be visible from the left hand side of the bicycle.

c. No person shall remove a registration plate from a bicycle during the period for which issued except upon a transfer of ownership or in the event the bicycle is dismantled and no longer operated upon any street in (Community Name).

Section 7. Renewal of Registration

a. An expired registration may be renewed upon application and payment of the same fee as upon an original application.

Section 8. Transfer of Ownership

a. Within 10 days after any registered bicycle has changed ownership or been dismantled and taken out of service or operation, the person in whose name the bicycle has been registered shall report such information to the Police Department. In case of change of ownership the registration shall thereupon be changed to show the name of the new owner, in case of dismantling and taking out of service or operation the registration shall be cancelled and identification tag returned to the Police Department.

Section 9. Lost Registration Plate

a. In the event that an owner shall lose his registration tag or same should be destroyed or stolen, he shall report same immediately to the Police Department, which shall then issue to such owner a new registration tag at a cost of _____ to such owner.

Section 10. Alteration of Registration Plates

a. It shall be unlawful for any person to alter or counterfeit any registration tag issued in conformity with this ordinance.

Section 11. Non-Resident

a. Any non-resident may operate a bicycle which is duly registered in any municipality, and equipped with registration plates, without obtaining a local registration, provided that such other municipality wherein said bicycle is registered, extends the same privilege.

b. Bicyclists must comply with local traffic ordinances.

Section 12. Unclaimed or Unidentified Bicycles

a. All abandoned bicycles and unidentified bicycles remaining in the hands of the Chief of Police shall, at the end of one year, be sold at auction.

Section 13. Traffic Ordinances Apply to Persons Driving Bicycles

a. Every person driving a bicycle upon a roadway shall be granted all the rights and shall be subject to all of the duties applicable to the driver of a vehicle by the laws of this state declaring rules of the road applicable to vehicles or by the traffic ordinances of this city applicable to the driver of a vehicle, except as to special regulations in this article and except as to those provisions of laws and ordinances which by their nature can have no application.

Section 14. Riding on Sidewalks

a. **Bicyclists exercising due care may drive and operate their bicycles upon the sidewalk, except sidewalks in the central business districts, in outlying business districts, pedestrian paths, public school grounds, or public play grounds, when such riding shall jeopardize the safety of pedestrians thereon.**

b. It shall be unlawful for any person driving a bicycle on the sidewalk to attempt to pass another person or persons going in the same direction on said walk, without giving a warning and until it becomes evident that the person so warned is aware of the approach of such person driving said bicycle. Pedestrians shall at all times have the right of way upon the sidewalks and if necessary, the person driving such bicycle shall dismount and vacate the sidewalk to prevent a collision, and any such person driving a bicycle upon the sidewalk must have the bicycle under control at all times.

Section 15. Riding on Roadways and Bicycle Paths

a. Every person operating a bicycle upon a roadway shall ride as near to the right hand curb or edge of the roadway as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction.

b. Persons driving bicycles upon a roadway, shall ride single file, if possible.

c. Wherever a usable bicycle path has been provided adjacent to a roadway, bicycle drivers shall use such path and shall not use the roadway.

d. The operator of any bicycle overtaking a motor vehicle proceeding in the same direction shall pass such vehicle at a safe distance to the right thereof, but no person driving a bicycle shall pass or attempt to pass another vehicle proceeding in the same direction unless such passing can be made in safety and at a place on a street other than an intersection without leaving the traveled portion of the road.

e. No person riding upon any coaster, roller skates, sled, toboggan or toy vehicle shall attach the same or himself to any vehicle upon a roadway or go upon any roadway except while crossing a roadway at a crosswalk.

Section 16. Riding on Bicycles--Carrying Extra Passengers

a. A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto.

b. No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.

c. No person except a tandem shall be used to carry any person except the operator unless equipped with a child's seat in which case the following conditions and regulations must be met.

   1. The operator shall be (specify - 16, 18 or 21) or older.

   2. The passenger shall be under the age of (specify) years, not exceed 50 pounds and be seated on the child's seat.

3. The child's seat shall be fastened securely to the bicycle and shall be located behind the operator's seat, shall be so designed and manufactured for this specific purpose and be equipped with safety belt, arm rest, back rest, foot and spoke protection, and have a firm seat and back and shall be attached to frame at 3 points with bolts or nuts--2 of which are at either side of the wheel axle.

4. Only one (1) child's seat shall be attached to a bicycle.

5. A child's seat may be used only after it has been inspected by the Police Department and found to comply with the provisions of this ordinance.

6. A bicycle equipped with a child's seat shall be operated only during the hours of daylight when such seat is occupied. (Optional, dependent on local needs and practices).

Section 17. Improper Riding, Trick Riding, & Racing

a. No person driving a bicycle upon a public highway or street shall participate in any race, speed, or endurance contest unless such race or endurance contest has the written permission of the City Manager and under the supervision of the Police.

b. No person riding or operating a bicycle shall perform or attempt to perform any acrobatic, fancy, or stunt riding upon any public highway or street.

Section 18. Obedience to Traffic-Control Devices

a. Any person operating a bicycle shall obey the instructions of official traffic-control devices applicable to vehicles, unless otherwise directed by a police officer.

Section 19. Stopping, Turning & Signaling

a No bicycle driver shall suddenly stop, slow down, or turn without giving an arm signal required by state law for the operation of motor vehicles.

b. Whenever authorized signs are erected indicating that no right or left turn or U-turn is permitted, no person operating a bicycle shall disobey the direction of any such sign, except where such person dismounts from the bicycle to make any such turn, in which event such person shall then obey the regulations applicable to pedestrians.

c. Right Turn--every person riding or operating a bicycle intending to turn to the right at an intersection or alley or driveway shall approach the turning point in the line of traffic nearest the right hand curb of the street.

d. Left Turn--every person riding or operating a bicycle intending to turn left at an intersection or to enter an alley or driveway shall approach the point of turning in the line of traffic nearest to the center of the roadway. The bicycle driver, in turning left at an intersection, shall pass to the left of the center of the intersection before turning unless otherwise directed by markers, buttons, or signs. At intersections where traffic is moving in opposite directions, if it is not safe for bicycles to make turns as mentioned above, the bicycle driver shall stay in the right hand lane and ride to the opposite corner, then dismount and walk the bicycle to the left hand corner and proceed. Left turns may also be made by riding to the opposite corner and then turning left and riding in normal riding position. Crosswalks shall be used when walking a bicycle through an intersection.

Section 20. Emerging from an Alley or Driveway

a. The operator of a bicycle emerging from an alley, driveway, or building shall stop prior to riding on or across a sidewalk or roadway. Such operator shall in all cases yield the right of way to all pedestrians approaching on said sidewalk and to all vehicles approaching upon said roadway.

Section 21. Speed

a. No person shall operate a bicycle at a speed greater than is reasonable and prudent under existing conditions.

b. No person shall operate a bicycle in excess of any posted speed limit.

Section 22. Parking

a. No person shall park any bicycle against windows or on the main traveled portion of the sidewalk, nor in such manner as to constitute a hazard to pedestrians, traffic, or property.

b. If there is no bicycle rack or other facilities intended to be used for the parking of bicycles in the vicinity, bicycles may be parked on the sidewalk in an upright position parallel to and within 24" of the curb.

Section 23. Clinging to Vehicles & Towing

a. No person driving a bicycle shall attach himself or his bicycle to any vehicle upon a roadway.

b. No person driving a bicycle shall tow or draw any coaster, wagon, sled, person on roller skates, toy vehicles or other similar vehicle on any street, highway or roadway. Only trailers designed for bicycles may be towed.

Section 24. Carrying Articles

a. No person driving a bicycle shall carry any package, bundle, or article which prevents the driver from keeping at least one hand upon the handlebars or obstructs the driver's vision.

Section 25. Brakes on Bicycles

a. No person may operate a bicycle upon a highway, bicycle lane or bicycle way unless all braking equipment with which the bicycle was originally provided is in good working order. No person may operate a bicycle equipped with a coaster brake upon a highway, bicycle lane or bicycle way unless such brake will enable the operator to make the rear wheel skid on dry, level, clean pavement.

Section 26. Handle Bars

a. Every bicycle that is equipped with handle bar grips must have said grips securely glued or cemented to the handle bars. Drop bars must be taped and plugged.

Section 27. Safety Equipment Required

a. No person may operate a bicycle upon a highway, bicycle lane or bicycle way during hours of darkness unless such bicycle is equipped with or the operator is wearing a lamp emitting a white light visible from a distance of at least 500 feet to the front of such bicycle. Such bicycle shall also be equipped with a red reflector that has a diameter of at least 2 inches of surface area on the rear so mounted and maintained as to be visible from all distances from 50 to 500 feet to the rear when directly in front of lawful upper beams of headlamps on a motor vehicle. A lamp emitting a red light visible from a distance of 500 feet to the rear may be used in addition to but not in lieu of the red reflector.

Section 28. Bicycle Agencies (Dealers) - Bicycle Establishments

a. All persons, firms, or corporations engaged in the business of buying second-hand bicycles are hereby required to make a (weekly/monthly) report to the Police Department giving the name and address of the person from whom each bicycle is purchased, the name, color, type, size, and serial number of each bicycle purchased, and the number of the metallic plate found thereon. All persons engaged in the business of selling new or second-hand bicycles are hereby required to make a weekly/monthly report to the Police Department, giving a list of all sales made by such dealers, which list shall include the name and address of each buyer, together with a description including frame number and the number of the metallic registration plate attached thereto, if any. A record of these transactions should be maintained for three years.

b. It shall be the duty of every person, firm, or corporation who sells or transfers ownership of any bicycle, to report such sale or transfer by returning to the Police Department the registration card issued to the owner thereof, together with the name and address of the person to whom said bicycle was sold or transferred, and such report shall be made within five (5) days of the date of said sale or transfer. It shall be the duty of the purchaser or transferee of such bicycle to apply for a transfer of registration therefore, within five (5) days of said sale or transfer.

Section 29. Rental Agencies

a. A rental agency shall not rent or offer any bicycle for rent unless the bicycle is registered and a registration plate is attached thereto as provided herein and such bicycle is equipped with the lamps and other equipment required by the state vehicle code.

Section 30. Effects of Regulations

a. It is unlawful for any person to perform any act forbidden or fail to perform any act required in this article.

b. The parent of any child and the guardian of any ward shall not authorize or knowingly permit any child or ward to violate any of the provisions of this ordinance.

c. The regulations applicable to bicycles shall apply whenever a bicycle is operated upon any highway or upon any path set aside for the exclusive use of bicycles subject to those exceptions stated herein.

Section 31. Penalties

a. Every person convicted of a violation of any provision of this article shall forfeit not more than _____ dollars or by removal and detention of the registration plate from such person's bicycle for a period not to exceed _____ days.

Section 32. Disposal of Offenders According to Age

a. Any offender under the age of 16 years disregarding the rules and regulations governing the operation of bicycles or vehicles not in conflict with the state laws, shall be directed to appear before the Juvenile Traffic Court or Juvenile Court Officer, who upon such appearance shall hear such person's case and dispose of same in such manner as prescribed by the court. Any person having attained the age of sixteen (16) years shall be dealt with in accordance with the ordinance governing vehicles and/or motor vehicles, and shall be disposed of as prescribed by such ordinance.

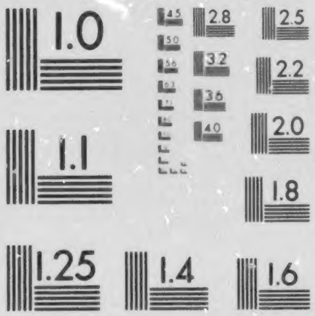
b. Bicycle riders 16 years of age and older will be issued a traffic citation if they violate the traffic laws. Fines will be the same as fines for drivers of motor vehicles. The younger bicycle riders under 16 years of age will be issued a bicycle violation ticket if they violate any of the bicycle laws. This ticket must be signed by their parents and returned to the Police Department by the violator.

Section 33. Revocation of License

a. The Chief of Police shall have authority to suspend the registration of and remove the number tags from any bicycle operated contrary to any state law or city ordinances, such suspension and removal to continue for a period not to exceed (specify) days. Such suspension and removal shall be in addition to other penalties provided hereunder. Registration cards shall be shown on demand or when ordered to appear for any violation of the bicycle ordinances.

Section 34. Bicycle Safety Bureau

a. The Chief of Police shall establish a Bicycle Safety Bureau in the (city) Police Department for the purpose of promoting and teaching traffic safety to violators of the bicycle ordinance of the city of __________ and any other individuals who desire to attend. The scheduling of this bureau and the rules, PG


1.0
4.5
5.0
5.6
6.3
7.1
8.0
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.8
1.1
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

regulations and curriculum shall be established by the Chief of Police subject to the approval of the Council of such rules, regulations and curriculum may be amended or revised from time to time in the same manner. (Optional)

Section 35. Bicycle Court

a. Violations of this ordinance may be formally processed through constitutional courts and statutory courts or may, in discretion with the _(city)_ Police Department in such cases where the consent of the violator, or parent, or guardian of a violator who is a minor, is obtained therefor, be processed by a special _(city)_ Children's Bicycle Court. Rules of procedure of such Bicycle Court shall be subject to review by the common council of the city of ________, and appeals from the decisions of such court shall be provided for by said rules. (Optional)

LEGAL ISSUES

ATTACHMENT E

EXAMPLES OF CITY BICYCLE ORDINANCES

ARTHUR F. HINTZ
CHIEF OF POLICE

PHONE
312-297-2131

Department of Police*
CITY OF DES PLAINES
COOK COUNTY, ILLINOIS

July 3, 1972

Hon. Herbert H. Behrel, Mayor
City of Des Plaines

Dear Mr. Mayor:

We will hopefully be prepared to start a concentrated effort to promote bicycle safety in Des Plaines in a few weeks. We are awaiting the necessary supplies to put our program into effect.

The areas we will be concentrating on are safety and training programs, registration, enforcement and bicycle routes. We are also preparing plans for a bicycle violators court which will be submitted to you in the near future for approval.

Concerning registration, we would propose that the City provide bicycle licenses to residents of Des Plaines at no cost. Of the estimated 30,000 bicycles in Des Plaines, some 4,000 are currently registered. Bicycle licenses purchased in large quantities would cost approximately .10 each. As a contribution to bicycle safety in our community, we feel the elimination of the license fee would facillitate the registration of bicycles.

In addition, more complete registration of bicycles may reduce the bicycle theft problem and would enable our department to return recovered bicycles to owners more readily.

If approved, we would plan to include registration of bicycles at the various bicycle rodeo's we will be conducting in the near future.

Your support and the support of the City Council will be greatly appreciated.

Sincerely,

James R. Scheskie
Lt. James Scheskie,
Des Plaines Police Department

BEST COPY AVAILABLE

*Source: Des Plaines Police Department, Proposal for Organization and Function of Bicycle Safety Program.

BEST COPY AVAILABLE

ARTHUR F. HINTZ
CHIEF OF POLICE

PHONE
312-297-2131

Department of Police
CITY OF DES PLAINES
COOK COUNTY, ILLINOIS

June 3, 1972

Hon. Herbert H. Behrel, Mayor
City of Des Plaines

and

Members of the Des Plaines City Council

Dear Mayor Behrel and Members of the City Council:

Please find attached, recommendations in the form of amendments, deletions and additions to Chapter 12 of the City Code relating to bicycles.

As an integral part of our upcoming bicycle program, education will be of prime importance in that we intend to instruct bicycle operators in the requirements of the law, followed by enforcement of those laws.

Accordingly, we submit the attached recommendations to you, with the request that they be directed to the proper council committee for evaluation.

We would welcome the opportunity to testify before the council committee regarding these proposed changes at any time.

Sincerely,

James R. Scheskie

Lt. James Scheskie,
Des Plaines Police Department

BEST COPY AVAILABLE

SUMMARY OF PROPOSED CHANGES - CHAPTER 12

BICYCLES

Attached are three copies relating to the Bicycle Code: One copy of the current Code, one copy of the proposed changes submitted by the Des Plaines Sagety Council and one copy of the proposed changes submitted by the Des Plaines Police Department.

TERMINOLOGY: Police Department proposal recommends 3 terms to identify the individual using a bicycle:

1. DRIVER - When an individual is using a bicycle on the roadway, he is identified as the driver of the bicycle.
2. RIDER - When an individual is using a bicycle on the sidewalk or path used for the exclusive use of bicycles, he is identified as the rider.
3. OPERATOR - When a regulation is intended to apply to the user of a bicycle on either roadway or sidewalk or path, he is referred to as the operator.

We request that this terminology be adopted as we will be conducting bicycle safety classes in classrooms and we intend to clarify the difference between the driver, rider and operator. If this terminology is used in the Bicycle Code, it will be more readily understood by those who have received proper instruction.

LICENSE FEE: We recommend that the bicycle license be provided to bicycle owners in Des Plaines free of charge. This will hopefully encourage registration, make the mandatory registration more acceptable, possibly reduce bicycle thefts and enable our department to return lost or stolen bikes to the proper owner more readily.

REGISTRATION: We propose that the registration of bicycles be handled by the Police Department, provided the license is issued free of charge. We would then maintain the bicycle registration file and see that the license is attached to the bicycle properly. It would also enable us to inspect the bicycle before issuing the license.

REPEAL OF SECTION 10-12-8: This section, long on the books, is not adhered to and is practically unenforceable. If the Police Department conducts registration, this section would not be necessary. In addition, many out-of-town persons buy bicycles at the various dealers in Des Plaines and many citizens buy bicycles from dealers in other communities. We are only interested in registering bicycles that belong to citizens of Des Plaines.

SUMMARY

PENALTIES: A new section recommended for adoption. We intend to organize a "Bicycle Violators Court" which would be held one day a month where bicycle violators of all ages would attend if given a notice to appear. This would be a voluntary system, unless the violator was issued a summons to regular traffic court. There is one bicycle violators court in effect in this area, and the Police Department sponsoring this reports very satisfactory results and community support.

The judge could be one of the "Junior City Officials" or young person selected from the "Youth Advisory Council."

Section "A" of the penalty section is intended for adult violators.

Sections "B" and "C" would be used for young offenders. Under Section "B" the "other penalty" may be an essay on bicycle safety or similar assignment.

SAVING CLAUSE: Self-explanatory

BEST COPY AVAILABLE

BICYCLES - POLICE DEPARTMENT RECOMMENDED CHANGES

CHAPTER 12

BICYCLES

SECTION

10-12-1 License Required
10-12-2 Licensing of Bicycles
10-12-3 Issuance of License
10-12-4 Registration File
10-12-5 Attachement of License
10-12-6 Transfer of Ownership
10-12-7 Rental Agencies
10-12-8 Traffic Laws Apply
10-12-9 Obedience to Traffic Control Devices
10-12-10 Operating Bicycle
10-12-11 Speed
10-12-12 Driving on Right
10-12-13 Emerging from Alley or Driveway
10-12-14 Clinging to Vehicles
10-12-15 Operating in Groups
10-12-16 Prudent Operation
10-12-17 Parking
10-12-18 Riding on Sidewalks
10-12-19 Lights
10-12-20 Signalling Devices
10-12-21 Brakes
10-12-22 General Bicycle Condition
10-12-23 Parent's Responsibility
10-12-24 Enforcement
10-12-25 Penalties
10-12-26 Saving Clause

10-12-1 LICENSE REQUIRED: No person who resides within the City shall ride or propel a bicycle on any street or upon any public path for the use of bicycles, unless such bicycle has been licensed and a license is attached thereto as provided herein.

10-12-2 LICENSING OF BICYCLES:

(A) The parent or guardian of any child below the age of fourteen (14) owning or operating a bicycle, shall obtain a permanent license for each bicycle. Any person fourteen (14) years of age or over owning a bicycle shall himself obtain a permanent license for each bicycle. Such licenses are not transferable.

(B) Licenses shall be obtained from the Police Department. Licenses shall be provided free of charge.

(C) Loss of a license or bicycle with license attached shall be reported immediately to the Police Department.

BEST COPY AVAILABLE

10-12-3 ISSUANCE OF LICENSE: The Chief of Police or someone designated by him shall issue a license to the owner of the bicycle, if the bicycle meets the requirements of this Chapter and the issuances of such license shall be the license to operate the bicycle on the streets of the City.

10-12-4 REGISTRATION FILE: The Police Department shall keep on file a list of registrations for official use. The license application shall include name of owner, address, telephone number, make of bicycle, type, size, color and manufacturer's serial number, if any.

10-12-5 ATTACHMENT OF LICENSE:

(A) The person designated to issue licenses shall issue a bicycle license upon presentation of a properly executed application as stated above. The license shall contain the number assigned to the bicycle and the name of the City.

(B) The Chief of Police shall cause such license to be firmly attached to the rear mudguard or frame of the bicycle for which issued in such position as to be plainly visible from the rear.

(C) No person shall remove a license from a bicycle during the period for which issued, except upon a transfer of ownership or in the event the bicycle is dismantled or no longer operated upon any street in the City, or when removed by Police Order.

10-12-6 TRANSFER OF OWNERSHIP: Upon the sale or other transfer of a licensed bicycle, the licensee shall remove the license.

10-12-7 RENTAL AGENCIES: A rental agency shall not rent or offer any bicycle for rent within the City, unless the bicycle is licensed and a license is attached thereto as provided herein, and such bicycle is equipped with lamps and other equipment required in this Chapter.

10-12-8 TRAFFIC LAWS APPLY: Every person driving or riding a bicycle upon a roadway or public path shall be subject to the provisions of the traffic laws of the City, applicable to the operator of a vehicle, and except as to special regulations in this Chapter and except to those provisions of the traffic laws which by their nature can have no application.

10-12-9 OBEDIENCE TO TRAFFIC CONTROL DEVICES:

(A) Any person driving or riding a bicycle shall obey the instructions of official traffic signals, signs and other control devices applicable to vehicles, unless otherwise directed by a police officer.

(B) Whenever authorized signs are erected indicating that no right or left or "U" turn is permitted, no person driving a bicycle shall disobey the direction of any such sign except where such person dismounts from the bicycle to make such turn, in which event the person shall obey the regulations applicable to pedestrians.

BEST COPY AVAILABLE

10-12-10 OPERATING BICYCLES: A person operating a bicycle shall not ride other than upon or astride the permanent and regular seat attached thereto. A seat designed for carriage of an infant, properly manufactured and installed over the rear fender may be used, provided they have a safety belt around said infant while riding the bicycle.

10-12-11 SPEED: No person shall operate a bicycle at a speed greater than is reasonable and prudent under the conditions then existing.

10-12-12 DRIVING ON RIGHT: Every person driving abicycle upon a roadway shall ride as near to the right hand side of the roadway as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction.

10-12-13 EMERGING FROM ALLEY OR DRIVEWAY: The operator of a bicycle emerging from an alley, driveway or building shall, upon approaching a sidewalk or the sidewalk area extending across any alleyway, yield the right-of way to all pedestrians approaching on said sidewalk or sidewalk area and upon entering the roadway shall yield the right-of-way to all vehicles approaching on the roadway close enough to constitute a hazard.

10-12-14 CLINGING TO VEHICLES: No person operating a bicycle shall attach the same or himself to any vehicle upon a public roadway or public path.

10-12-15 OPERATING IN A GROUP: Persons operating bicycles upon a roadway shall drive in single file except on paths or parts of roadways set aside for the exclusive use of bicycles.

10-12-16 PRUDENT OPERATION: No person operating a bicycle shall carry any package, bundle or article which prevents the operator from safe normal operation of the bicycle. Driving or riding a bicycle on a public roadway or path with no hands on the handle bars is specifically prohibited.

10-12-17 PARKING: No person shall park a bicycle so it will interfere with normal flow of pedestrian traffic, vehicular parking or vehicular flow of traffic.

10-12-18 RIDING ON SIDEWALKS:

(A) The Chief of Police is authorized to erect signs on any sidewalks or roadway prohibiting the operation of bicycles thereon by any persons and, when such signs are in place, no person shall disobey same.

(B) Whenever any person is riding a bicycle upon a sidewalk, such person shall yield the right-of-way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian.

BEST COPY AVAILABLE

10-12-19 LIGHTS: It shall be unlawful to operate a bicycle on any street or sidewalk during the period from one-half (1/2) hour after sunset to sunrise, which bicycle is not equipped with at least one (1) lighted lamp firmly secured to the front mudguard or handlebars of the bicycle, showing a white light visible at least five hundred feet (500') in the direction toward which the bicycle is proceeding and at least one (1) lighted lamp showing a red light in the opposite direction. In lieu of such rear lighted red lamp, a red reflector glass button, not less than one and one-half inches (1-1/2") in diameter or not less than four square inches (4 sq.") of red reflecting tape may be mounted securely on the rear mudguard, or lacing a mudguard on the rear of the saddle.

10-12-20 SIGNALLING DEVICES: It shall be unlawful to operate a bicycle on any street, sidewalk or other public place, which bicycle is not equipped with a mechanical or electrical signalling device in good working order and audible at a distance of not less than twenty-five feet (25') when sounded, except that no bicycle may be equipped with or make use of any gong, siren or mechanical whistle.

10-12-21 BRAKES: Every bicycle shall be equipped with a brake adequate to control the movement of and to stop such bicycle whenever necessary. The brake shall be maintained in good working order at all times.

10-12-22 GENERAL BICYCLE CONDITION: No bicycle shall be operated where its mechanical condition shall impair the safe operation of the bicycle.

10-12-23 PARENT'S RESPONSIBILITY: The parents of any child and the guardian of any ward shall not authorize or knowingly permit any child or ward to violate any of the provisions of this Chapter. Any parent or guardian authorizing or knowingly permitting such violation shall, upon conviction thereof, be guilty of a misdeameanor

10-12-24 ENFORCEMENT: The Des Plaines Police Department is specifically designated to enforce all provisions in this Chapter.

10-12-25 PENALTIES:

(A) Any person convicted of a violation of any provision of this Chapter shall be punished by a fine of not less than one dollar ($1.00) nor more than twenty-five dollars ($25.00) for each offense, or

(B) Fulfill other penalties imposed by the Bicycle Violators Court or Court Appointed Officer.

10-12-26 SAVING CLAUSE: If any clause, sentence or part of this Chapter shall be adjudged invalid by any court, it shall not effect the remainder of this chapter.

BEST COPY AVAILABLE

*Source: Cranford Police Department, Bicycle Safety Alert Program.

TOWNSHIP OF CRANFORD, NEW JERSEY

Chapter 6. BICYCLES*

NOTE: For state law regulating bicycle equipment and traffic, see R.S. 39:3-69, 39:4-10 et seq.

ANALYSIS

Section

6- 1, "Bicycle" defined
6- 2, Registration and tag or decal requirements for operation or rental
6- 3, Application for registration certificate and tag
6- 4, Issuance of registration certificate, tag or decal; prior inspection; term registration
6- 5, Registration fee
6- 6, Form and content of certificate, tag or decal
6- 7, Affixing and display of tag or decal
6- 8, Responsibility on transfer of title or dismantling of bicycle
6- 9, Transfer of certificate and tag or decal
6-10, Reports of purchases and sales by dealers
6-11, Registration tag or decal to be affixed to rented bickcles
6-12, Records required to be kept by police department
6-13, Replacement of stolen, lost or mutilated certificates and tags or decals
6-14, Removal, alteration or defacing of tags or decals and bicycle serial numbers prohibited
6-15, Revocation and suspension of registration certificates and tag or decal
6-16, Safety rules and regulations
6-17, Police inspection; impounding and release of bicycle
6-18, Intent of chapter; juvenile offenders
6-19, Penalty

6-1. "Bicycle" defined - For the purpose of this chapter

Bicycle means and includes any conveyance upon which a person may ride propelled wholly or in part by human muscular power and having two (2) tandem wheels

6-2. Registration and tag or decal requirements for operation or rental

(a) No person residing in the township shall operate a bicycle upon any public street or other public place within the Township unless such bicycle has been registered with the Police Department

BEST COPY AVAILABLE

as evidenced by a registration certificate, and a registration tag or decal is attached to such bicycle, as provided in this chapter.

(b) No person engaged in the business of renting bicycles for hire in the township shall rent or offer for rent any bicycle which has not been registered and which does not have attached thereto a valid registration tag or decal pursuant to this chapter.

6-3 Application for registration certificate and tag or decal

Each application for a bicycle registration certificate and a registration tag or decal, or for a transfer thereof, shall be made to the police department on a form approved by the chief of Police and shall be accompanied by the prescribed registration fee. Such application shall set forth the name and address of the owner, a description of the bicycle, the name of the manufacturer, and the serial number appearing on the frame of the bicycle.

6-4 Issuance of registration certificate and tag or decal; prior inspection; term of registration

(a) The police department may cause an inspection to be made of each bicycle for which an application is made under section 6-3, as to its safe mechanical condition, and as to the ability of the applicant to operate the bicycle safely. Maintenance of a bicycle in a safe mechanical condition is the sole responsibility of the owner.

(b) Upon approval of the application, the police department shall issue a registration certificate together with a registration tag or decal for each bicycle.

(c) All bicycle registrations shall expire on December 31st of each odd-numbered year.

BEST COPY AVAILABLE

6-5 Registration fee

A fee of $.50 shall be paid for each registration. No registration certificate and no tag or decal shall issue unless the registration fee shall have been paid, except as otherwise provided in section 6-9.

6-6. Form and content of certificate and tag or decal

(a) Every registration certificate shall be numbered in sequence and shall set forth the name and address of the owner of the bicycle, and the serial number appearing on the frame of the bicycle.

(b) The police department shall stamp on the frame of the bicycle on which no serial number can be found or on which said serial number is illegible for identification purposes a number of the police department to be used in the administration of this ordinance to prevent bicycle larceny and recover stolen bicycles.

(c) Registration tags or decals shall be numbered in sequence and the number theron shall correspond to the number on the registration certificate issued for such bicycle.

6-7. Affixing and display of tag or decal

The registration tag or decal shall be attached to the bicycle in a conspicuous place

6-8. Responsibility on transfer of title or dismantling of bicycle

Each person who sells, transfers ownership of, or permanently dismantles any bicycle registered pursuant to the provisions of this chapter, shall make a report thereof, and surrender the registration certificate and tag to the police department and shall remove the decal, if any, within 3 days thereafter. When the bicycle has been sold or ownership transferred, the report shall include the name of the person to whom such sale or transfer was made.

6-9 Transfer of certificate and tag or decal

Where the owner of a registered bicycle surrenders the registration certificate and tag or decal pursuant to the provisions of section 6-8, he may, upon application, obtain the transfer of said certificate and tag or decal to another bicycle owned by him provided the application for transfer and substituted bicycle comply with the provisions of section 6-3 and 6-4. A transfer fee of $.25 shall be paid.

6-10. Reports of purchases and sales by dealers

All persons engaged in the business of buying second-hand bicycles or selling new or second-hand bicycles are hereby required to make a report to the police department of any purchases of second hand bicycles or sale of new or second hand bicycle, giving the name and address of the person from or to whom each bicycle is purchased or sold, with the description of each bicycle, the frame numbered thereof, and the number of the registration tag or decal fround thereon, if any.

Such reports shall be made within 24 hours from the date of the sale.

6-11. Registration tag or decal to be affixed to rented bicycles

Any person engaged in the business of renting, hiring or loaning bicycles shall first obtain a registration tag or decal for each bicycle, and shall pay the regular fee for such license as provided in section 6-5. The registration tag or decal shall be affixed to the bicycle in the manner provided in section 6-7.

6-12 Records to be kept by the Police Department

The police department shall keep a record of the registration of all bicycles, including the number of each registration certificate and tag or decal issued, the date of issuance, the name and address of the person to whom issued, and the name or make and the serial number on the frame of the bicycle for which issued.

6-13 Replacement of stolen, lost or mutilated certificates and tags or decals

Whenever an issued registration certificate or registration tag or decal is lost, stolen or mutilated, a replacement certificate or tag or decal shall be required by the police department

6-14 Removal, alteration or defacing of tags or decals and bicycle serial numbers prohibited

(a) No person shall remove, destroy, mutilate or alter any registration tag or decal except that a tag or decal may be so removed for the purpose of surrendering the same to the police department in the event of sale or transfer of ownership or dismantling as provided in section 6-8.

(b) No person shall remove, destroy, mutilate or alter the serial number on the frame of any bicycle or have in his possession any bicycle on which said serial number is removed, destroyed, mutilated or altered.

6-15 Revocation and suspension of registration certificate and tag or decal.

(a) In addition to the penalty prescribed in section 6-19, any registration certificate and tag or decal issued for a bicycle may be revoked for cause after hearing, before the chief of police or his designated representative. A written notice, setting forth the charges, and the time and place of the hearing shall be served upon the person to whom the certificate and plate were issued.

(b) The chief of police or his designated representative pending the hearing, may suspend the registration certificate and or decal if, in his judgement, the protection of the public safety so demands. In such event, the owner of the bicycle shall not permit or suffer the use of the bicycle upon any street or public place.

(c) In the event of either revocation or suspension, the owner of the bicycle shall forthwith surrender the registration certificate and tag or remove the decal.

6-16 Safety rules and regulations

(a) No person shall operate a bicycle upon the sidewalks of the township.

(b) No operator of a bicycle shall leave a bicycle lying on or standing upon the sidewalk in such a manner as to hinder or impede pedestrians

6-17 Police inspection; impounding and release of bicycle

(a) The police of the township may inspect any bicycle on any public street or place at any time to ascertain whether or not it (1) has been properly registered; or (2) has a registration tag or decal properly fixed thereto; and (3) is in pr proper mechanical condition to be operated safely.

(b) In the event that a bicycle is being used or operated without the registration tag or decal, or is in such condition as to be unfit for safe operation, or there is a failure to comply with the requirements of this chapter, the police may impound the bicycle until such time as the onwer or registrant has procured the necessary registration tag or decal, or has rendered the bicycle safe for use, or has fully complied with all requirements of this chapter.

(c) Whenever any bicycle shall be impounded for violation of the provisions of this ordinance it shall be surrendered at the expiration of the impounded period to the parents or the guardian of the offender on the payment of a charge for storage, at the descretion of the chief of Police, but if a charge is made it shall not exceed $2.00 for the first impoundment and $5.00 for the second impoundment. In the case of seizure of a bicycle because it has been found in the possession of a person, firm, partnership or corporation not the legal owner thereof, and the bicycle is not reclaimed by the legal owner thereof, it shall be sold at public auction - after the expiration of 30 days from the date of seizure. Notice containing a description of the bicycle shall be published in a newspaper circulating in the township of Cranford at least one week prior to the date of the sale. The proceeds of the sale shall be remitted to the treasurer of the registration fund.

6-18. Intent of chapter; juvenile offender.

The intent of this chapter is not the prosecution of children, but the education and training of children for their own and the community welfare. Failure to comply with, or the violation of any provisions of this chapter or with the safety regulations promulgated by the chief of police may also subject the operator to the authority having jurisdiction over juvenile offenders.

6-19. Penalty.

Any person over the age of 18 years who violates any provision of this article shall, upon conviction thereof, be punished by a fine not exceeding $50.00 or by imprisonment for a term not exceeding 15 days, or both.

Bicycles*

BEST COPY AVAILABLE

CHAPTER 5.

BICYCLES.[1]

Article I. In General.

§ 5-1. Definitions.
§ 5-2. Responsibility of parent.
§ 5-3. Applicability of chapter.
§ 5-4. Penalty for violating chapter.

Article II. Licenses.

§ 5-8. "Bicycle" defined.
§ 5-9. License--Required.
§ 5-10. Same--Application.
§ 5-11. Same--Renewal.
§ 5-12. Same--Fees.
§ 5-12.1. Same--Refunds.
§ 5-13. Same--Period of validity.
§ 5-14. Same--Issuance by sellers.
§ 5-15. License and registration certificate.
§ 5-16. Removal or alteration of numbers or licenses.
§ 5-16.1. Authority of police chief to number bicycles.
§ 5-16.2. Retailers.
§ 5-16.3. Change of owner or address.
§ 5-16.4. Transfer of license.
§ 5-16.5. Rental agencies.
§ 5.16.6. Exceptions to license requirements.
§ 5.16.7. Penalties.

Article III. Operation Generally.

§ 5-17. Applicability of traffic laws.
§ 5-18. Obedience to traffic control devices.
§ 5-21. Speed.
§ 5-22. Emerging from alley, driveway, bicycle path, etc.; entering bicycle lane or roadway.

---

[1] For state law as to operation of bicycles, see Veh. C., § 21200 et seq. As to authority of city to license and regulate the operation and equipment of bicycles, see Veh. C., § 21206.

As to bicycle parking zones, see § 16-66 of this code. As to special bicycle travel lane on "A" Street, see § 16-11

*Source: Pelz, Bicycle Programs: City of Davis.

Davis City Code

§ 5-26 Riding on sidewalks, playgrounds, etc.

Article IV. (blank)

Article V. Bicycle Paths and Lanes.

§ 5-32 Establishment; signs
§ 5-37 Walking bicycles.
§ 5-38 Vehicles exempted form Sec. 21209 of the Vehicle Code of California

Article I. In General.

Sec. 5-1. Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by the section:

Bicycle lane. That portion of a roadway set aside for the use of bicycles and so designated as provided in section 5-32.

Bicycle path. A pathway for bicycles and pedestrians paralleling a roadway, the side of the bicycle path closest to the roadway being not more than seventy-five feet distant from said roadway. Persons riding bicycles upon such pathways shall be subject to the provisions of section 5-22.

Sec. 5-2. Responsibility of parent.

The parent of any child and the guardian of any ward shall not authorize or knowingly permit any child or ward to violate any of the provisions of this chapter. (Code 1964, § 4-3.1701.)

Sec. 5-3. Applicability of chapter.

The regulations contained in this chapter shall apply whenever a bicycle is operated upon any street or sidewalk, or upon any public path set aside for the exclusive use of bicycles, subject to those exceptions stated herein. (Code 1964, § 4-3.1701.)

Sec. 5-4. Penalty for violating chapter.

Where this chapter has been violated by persons under the age of eighteen years, in lieu of fines and imprisonment therefor, and in lieu of filing charges in juvenile court, the chief of police or his duly appointed representative may impound the bicycle so used in such violation for a period not to exceed thirty days and the owner's registration card shall be held for like period or require of the violator any of the following or any combination thereof:

BEST COPY AVAILABLE

(a) Attend traffic school for a period of six Saturdays.

(b) Be deprived of bicycle for a period not to exceed thirty days.

(c) Have parents of violator deprive violator of bicycle for a period not to exceed thirty days.

(d) Have bicycle equipment inspected at the police department within five days of any equipment violations.

(e) Write a composition of not less than two hundred words on a subject, title specified by the chief of police or his representative.

(f) Obtain a city bicycle license immediately and pay the penalty required in section 5-9.

(g) Copy the section of bicycle chapter violated one hundred times. (Code 1964, § 4-3.1701.)

Article II. Licenses.

Sec. 5-8. "Bicycle" defined.

For purposes of this article, a bicycle is any device upon which a person may ride, which is propelled by human power through a system of belts, chains or gears, and which has wheels at least twenty inches in diameter and a frame size of at least fourteen inches. (Ord. No. 775, § 1.)

Sec. 5-9. License--Required.

No person shall ride, move or leave standing or allow to be ridden, moved or left standing any bicycle on any street, highway, public way or public property within the city unless such bicycle has been registered and licensed pursuant to the licensing requirements of state law, and a current license or renewal tag affixed to the bicycle in accordance with the provisions of this chapter.

Any license tag issued prior to October 1, 1975 shall be recognized as valid in satisfaction of the requirements of this section until August 31, 1976, at which time a new license must be obtained pursuant to this chapter. (Ord. No. 755, § 1.)

Sec. 5-10. Same--Application.

Application for a bicycle license shall be made upon a registration form provided by the city. The registration form shall contain the name and address of the owner of the bicycle; a description of the bicycle, including its serial number; the make, type and model of the bicycle and such other information as may be required by the chief of police to properly register and identify the bicycle to be licensed. (Ord. No. 775, § 1.)

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Sec. 5-11. Same--Renewal.

Application for renewal of a bicycle license shall be made upon a renewal form provided by the city. The renewal form shall contain such information as may be required by the police chief to properly renew the bicycle license. (Ord. No. 775, § 1.)

Sec. 5-12. Same--Fees.

Every applicant for a bicycle license and every applicant for renewal of a bicycle license shall pay to the police chief a license fee to be assessed on the basis of one dollar and fifty cents per year or fractional part thereof. The time period for which the license fee is to be calculated shall commence from the date the applicant is liable for the licensing of the bicycle to the last day of the license period.

All amounts collected in excess of the cost of conducting and administering the bicycle licensing program shall be used for the support of this article and to improve bicycle safety programs and to construct, maintain and promote bicycle trails, paths, and lanes. (Ord. No. 775, § 1.)

Sec. 5-12.1 Same--Refunds.

Whenever the owner of a bicycle licensed by the city under this article intends to establish residence in another state or foreign country and to remove such licensed bicycle to out of state or foreign residence, such person may, within sixty days of the change of residence, apply for a refund of a prorata portion of the license fee attributable to the unexpired licensing period calculated from the first day of the month following the change of residence.

All such applications for refund shall contain a declaration under penalty of perjury that the applicant intends to terminate his or her state residency upon a stated date, within sixty days of the application for refund. Such application shall be accompanied by the bicycle license indicia. (Ord. No. 785, § 1.)

Sec. 5-13. Same--Period of validity.

The license period shall be as specified by the director of the department of motor vehicles for the state. A license issued after the first day of a license period shall be valid from the date of issuance of the license to the last day of license period. (Ord. No. 775, § 1.)

Sec. 5-14. Same--Issuance by sellers.

The police chief may authorize the issuance of licenses by sellers of bicycles in conformity with the requirements of the chapter, and may adopt administrative regulations to implement this section. (Ord. No. 775, § 1.)

Sec. 5-15. License and registration certificate.

Upon satisfactory completion of the registration form and payment

BEST COPY AVAILABLE

of the license fee, the city shall issue to the applicant a license and a registration certificate which shall have corresponding number. The license shall be provided by the state and shall be affixed to the frame of the bicycle on the seat support member halfway between the seat and the pedals facing forward. The police chief shall keep a record of the date of issue of each license, to whom issued and the number thereof. The license shall bear a unique license number and shall be permanently assigned the bicycle. Renewal tags shall be provided by the state and shall be affixed in the manner prescribed by law. If a license is damaged or destroyed, a replacement shall be obtained from the police chief upon presenetation of the registration certificate and a fee to be determined by the police chief, but not to exceed one dollar. (Ord. No. 775, § 1.)

Sec. 5-16. Removal or alteration of numbers or licenses.

No person shall wilfully or maliciously remove, destroy, mutilate or alter the number of any bicycle frame licensed under this chapter. No person shall remove, destroy, mutilate, reproduce or alter any license renewal tag or registration certificate during the time such license, renewal tag or registration certificate is in effect; provided, that nothing in this chapter shall prohibit the city from stamping numbers on the frames of bicycles on which no serial number can be found, or on which the number is illegible or insufficient for identification purposes. (Ord. No. 775, § 1.)

Sec. 5-16.1 Authority of police chief to number bicycle.

All bicycles shall have, as a means of identification, serial numbers stamped on the frame of the bicycle. The police chief, or the police chief's authorized representative, may stamp numbers or symbols on the frames of bicycles not bearing manufacturer's serial numbers. (Ord. No. 775, § 1.)

Sec. 5-16.2 Retailers.

Any person engaged in the retail business of selling new or second-hand bicycles shall make periodic reports to the police chief, as specified by the police chief on forms provided by the city, giving a list of all sales by such retailer which shall include:

(a) The name and address of each person to whom a bicycle is sold.

(b) A description of the bicycle sold, including the brand name, color and other distinguishing marks.

(c) The serial number and where located on bicycle.

(d) The number of the state license affixed thereto, if any.

Such retailer shall also send to the police chief with such reports the registration certificate, if any, of the former owner of each second-hand bicycle sold. In addition, such retailer shall supply to each purchaser a record of the information, name of retailer, address or retailer, year and make of bicycle and serial number. (Ord. No. 775, § 1.)

BEST COPY AVAILABLE

Sec. 5-16.3. Change of owner or address.

(a) Whenever the owner of a bicycle which is licensed pursuant to provisions of this chapter sells or otherwise disposes of the bicycle, he or she shall, within ten days, notify the police chief of such disposition.

(b) Whenever the owner of a bicycle which is licensed pursuant to the provisions of this chapter changes his or her address, he or she shall, within ten days, notify the police chief of the old and new address.(Ord. No. 775, § 1.)

Sec. 5-16.4. Transfer of license.

Any person who purchases or otherwise acquires possession of a bicycle which is licensed pursuant to the provisions of this chapter shall, within ten days of taking possession, apply for the transfer of the license to his or her name. Such person shall present the current registration certificate for the bicycle and other proof of ownership as may be required by the police chief with a fee to be determined by the police chief, not to exceed one dollar at the time of application for transfer of the license. (Ord. No. 775, § 1.)

Sec. 5-16.5. Rental agencies.

A rental agency shall not rent or offer any bicycle for rent in the city unless the bicycle is licensed, a license is attached thereto and the bicycle complies with the equipment requirements of the state Vehicle Code. (Ord. No. 775, § 1.)

Sec. 5-16.6. Exceptions to license requirements.

(a) Bicycles owned by children living in any charitable institution or owned by such institution shall be licensed, but no fee shall be collected for these licenses.

(b) Bicycles purchased by any group or organization qualifying for the state welfare exemption as defined in Revenue and Taxation Code section 214 shall be licensed, but no fee shall be collected for these licenses.

(c) Any person who is not a resident of the city is not required to obtain a city license for a bicycle which remains in the city for a period of less than five days. (Ord. No. 775, § 1.)

Sec. 5-16.7. Penalties.

(a) Any bicycle left standing in a public place, which bears no license, may be impounded until the owner obtains a license as

BEST COPY AVAILABLE

required under this chapter. If the bicycle is held for ninety days and within that time no one lawfully entitled to the bicycle appears at the police department and requests the release of the bicycle and obtains a license, the bicycle may be sold or disposed of according to law.

(b) No parent of any child or the guardian of any ward shall authorize or knowingly permit any such child or ward to violate any of the provisions of this chapter.

(c) Any violation of this chapter shall be deemed to be an infraction. The fine imposed for any violation shall not exceed the sum of five dollars.

(d) Failure of owner to claim a bicycle within seven days after notification of storage by the police department may result in the charging of twenty-five cents per day storage fee. Fees shall not be charged for the first seven days of storage. (Ord. No. 775, § 1.)

Article III. Operation Generally.

Sec. 5-17. Applicability of traffic laws.

Every person riding a bicycle upon a street or sidewalk shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicles, this Code or other ordinances of this city applicable to the driver of a vehicle, except as to those provisions of laws and ordinances which by their nature can have no application, and except as otherwise provided in this chapter. (Code 1964, § 4-3.1713; Ord. No. 442, § 1.)

Sec. 5-18. Obedience to traffic control devices.

Any person operating a bicycle shall obey the instructions of official traffic control signs, and other control devices applicable to vehicles and bicycles, unless otherwise directed by a police officer. (Code 1964, § 4-3.1714; Ord. No. 442, § 2.)

Sec. 5-21. Speed.

No person shall operate a bicycle at a speed greater than is reasonable and prudent under the conditions then existing. (Code 1964, § 4-3.1717.)

Sec. 5-22. Emerging from alley, driveway, bicycle path, etc.; entering bicycle lane or roadway.

The operator of a bicycle emerging from an alley, driveway, bicycle path, building or otherwise approaching upon a sidewalk or a sidewalk area extending along any such area shall yield the right of way to all pedestrians approaching on such sidewalk or sidewalk area, and upon entering a bicycle lane, shall yield the right of way to all

BEST COPY AVAILABLE

bicycles approaching on such lane, and upon entering the roadway shall yield the right of way to all vehicles or bicycles approaching on such roadway. (Code 1964, § 4-3.1718; Ord. No. 442, § 4; Ord. No. 568, § 2.)

Sec. 5-26. Riding on sidewalks, playgrounds, etc.

(a) No person shall ride a bicycle upon a sidewalk within the central traffic district.

(b) The city traffic engineer, with the approval of the Safety Advisory Commission, is authorized to erect or place signs in any other district on any sidewalk or roadway, prohibiting the riding of bicycles thereon by any person and when such signs are in place no person shall disobey the same. Before such a sign is erected or placed, it must be found by the Safety Advisory Commission, (1) that the riding of bicycles on such sidewalk or roadway will endanger pedestrian traffic or the public safety, or (2) that a property right or interest belonging to the city may be terminated or forfeited if the riding of bicycles on such sidewalk or roadway is not prohibited.

(c) Whenever any person is riding a bicycle upon a sidewalk such person shall yield the right of way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian.

(d) No person shall ride or operate a bicycle upon any playground, park or school ground, where children are playing, without the permission the persons having supervision of the playground, park or school ground. (Code 1964, § 4-3.1722.)

Sec. 5-32. Establishment; signs.

The city engineer, upon approval of the Safety Advisory Commission, is authorized to erect or place signs upon any street or adjacent to any street in the city indicating the existence of a bicycle lane and otherwise regulating the operation and use of vehicles and bicycles with respect thereto.

Sec. 5-37. Walking bicycles.

Bicycles may be walked subject to all provisions of law applicable to pedestrians. (Ord. No. 442, § 5.)

Section 5-38. Vehicles exempted from Sec. 21209 of the Vehicle Code of the State of California

Traffic enforcement vehicles operated by the Police Department and maintenance vehicles involved in routine or emergency maintenance operated by Public Works Department, Life Enrichment Department, Post Office and waste collection are exempted from Section 21209 of the Vehicle Code of the State of California.

CONCORD POLICE DEPARTMENT
BICYCLE SAFETY UNIT

BICYCLE LAWS

LOCAL and STATE

122

JAMES L. CHAMBERS
CHIEF OF POLICE

TABLE OF CONTENTS

CONCORD MUNICIPAL CODE
BICYCLES

3301. Issuance of License and Identification Symbol 1
3308. Fees 1
3318. Parking 1
3320. Parks, Playgrounds and Schools 1
3322. Bicycle Dealers – Fee Retention 1
4210. Riding Bicycles on Sidewalks 1

CALIFORNIA VEHICLE CODE
OPERATION OF BICYCLES

406. Motorized Bicycles – Defined 2
12509. Instruction Permits 2
12804. Driver's Examination: Classification 2
21200. Laws Applicable to Bicycle Use – Bicycle Defined 2
21201. Equipment Requirements 3
21201.5 Reflectorized Equipment 3
21202. Keep to Right 4
21203. Hitching Rides 4
21204. Riding on Bicycle 4
21205. Carrying Articles 5
21207.5. Motorized Vehicles: Prohibited Operation 5
21208. Bicycle Lanes: Bicycles 5
21209. Bicycle Lanes: Motor Vehicles 5
21210. Parking 6
21717. Bicycle Lanes: Motor Vehicle Turning 6
21804. Public or Private Property 6
21966. Bicycle Lanes: Pedestrians 6
22111. Hand Signals 6

REGISTRATION AND LICENSING

39000. Bicycle Defined 7
39001. Licenses and Registration Forms 7
39002. License Requirement 7
39003. Issuance to Owner 7
39004. Fees 8
39005. Records 8
39006. Information Required Upon Retail Sales 8
39007. Serial Numbers 8
39008. Recordation of Transfer 8
39009. Change of Address 9
39010. Existing Licenses 9
39011. Fines 9
39012. Impoundment 9
39013. Motorized Bicycles: Licensing Requirements 9

CONCORD MUNICIPAL CODE
BICYCLES

3301. ISSUANCE OF LICENSE AND IDENTIFICATION SYMBOL

(a) The Chief of Police is hereby authorized and directed to issue bicycle licenses upon written application therefor.

3308. FEES

License fees shall be paid as follows:

(a) Three Dollars ($3.00) for the issuance of a bicycle license while such bicycle is in the possession of the owner to whom the license is issued herein. In the event of a change or transfer of ownership of the bicycle, a new bicycle license fee of One Dollar and Fifty Cents ($1.50) shall be paid by the new owner or transferee to the City.

(b) Fifty Cents ($.50) for the issuance of a duplicate license to replace a license which has been destroyed, obliterated, or removed from the bicycle.

3318. PARKING

No person shall park any bicycle against windows or parking meters or on the main traveled portion of the sidewalk, nor in such manner as to constitute a hazard to pedestrians, traffic or property. If there are no bicycle racks or other facilities intended to be used for parking bicycles in the vicinity, bicycles may be parked on the sidewalk in an upright position parallel to and within twenty-four inches (24") of the curb.

3320. PARKS, PLAYGROUNDS AND SCHOOLS

No person shall ride or operate a bicycle upon any playground, park or schoolground where children are playing, without permission of the person having supervision thereof.

3322. BICYCLE DEALERS – FEE RETENTION

Each bicycle dealer in the City of Concord who performs bicycle licensing services on behalf of the City of Concord shall retain Fifty Cents ($.50) of the license fee collected as payment for such services rendered.

4210. RIDING BICYCLES ON SIDEWALKS

It shall be unlawful for any person to ride or operate any bicycle with the wheel size in excess of twenty inches (20") on any sidewalks in front of stores, schools, or buildings used for business purposes.

BEST COPY AVAILABLE

CALIFORNIA VEHICLE CODE
OPERATION OF BICYCLES
(Synopsis)

406. MOTORIZED BICYCLES – DEFINED

A "motorized bicycle" is any two-wheeled or three-wheeled device having pedals for propulsion by human power, or having no pedals if powered solely by electrical energy and an automatic transmission and a motor which produces less than two (2) gross brake horsepower and is capable of a maximum speed of not more than thirty (30) miles per hour on level ground.

12509. INSTRUCTION PERMITS

(c) Any person, while having in his immediate possession a valid permit, may operate a motor vehicle, other than a motorcycle or a motorized bicycle, when either taking the driver training instruction, or when practicing such instruction, and when accompanied by, and under the immediate supervision of, a California licensed driver 18 years of age or over whose driving privilege is not on probation.

(d) Any person while having in his immediate possession a valid permit, who is age 15 years and 6 months or over and who has successfully completed approved courses in automobile education and driver training, and any person while having in his immediate possession a valid permit who is age 17 years and 6 months or over, may in addition to operating a motor vehicle, also operate a motorized bicycle, except that such person shall not operate a motorized bicycle during hours of darkness, shall stay off any freeways and shall not carry any passenger.

12804. DRIVER'S EXAMINATION: CLASSIFICATION

(g) Any person holding a valid California driver's license of any class may operate a motorized bicycle without taking any special examination for the operation of a motorized bicycle and without having a class 4 endorsement on such license.

21200. LAWS APPLICABLE TO BICYCLE USE – BICYCLE DEFINED

Every person riding a bicycle upon a roadway has all the rights and is subject to all the duties applicable to the driver of a vehicle, except those provisions which by their very nature have no application.

A bicycle is a device upon which any person may ride, propelled by human power and having either two or three wheels in a tandem or tricycle arrangement.

21201. EQUIPMENT REQUIREMENTS

(a) No person shall operate a bicycle on a roadway unless it is equipped with a brake which will enable the operator to make one braked wheel skid on dry, level, clean pavement.

(b) No person shall operate on the highway any bicycle equipped with handlebars so raised that the operator must elevate his hands above the level of his shoulders in order to grasp the normal steering grip area.

(c) No person shall operate a bicycle which is of such a size as to prevent the operator from safely stopping, supporting it in an upright position with at least one foot on the ground, and restarting it in a safe manner.

(d) Every bicycle operated during darkness shall be equipped with:

(1) With a lamp emitting a white light which, while the bicycle is in motion, illuminates the highway in front of the bicyclist and is visible from a distance of 300 feet in front and from the sides of the bicycle;

(2) A red reflector on the rear which will be visible from a distance of 500 feet to the rear;

(3) A white or yellow reflector on each pedal visible from the front and rear of the bicycle from a distance of 200 feet; and

(4) With a white or yellow reflector on each side forward of the center of the bicycle, and a white or red reflector on each side to the rear of the center of the bicycle, except that bicycles which are equipped with reflectorized tires on the front and the rear need not be equipped with side reflectors.

(e) A lamp or lamp combination, emitting a white light, attached to the operator and visible from a distance of 300 feet in front and from the side of the bicycle may be used in lieu of the lamp required by clause (1) of subdivision (d).

21201.5 REFLECTORIZED EQUIPMENT

(a) No person shall sell or offer for sale a reflex reflector or reflectorized tire for use on a bicycle unless it is of a type approved by the department.

(b) No person shall sell or offer for sale a new bicycle that is not equipped with a white or yellow reflector, of a type approved by the department on each pedal visible from the front and rear of the bicycle during darkness from a distance of 200 feet and with a white or yellow relfector on each side forward of the center of the bicycle and with a white or red reflector on each side to the rear of the center of the bicycle, except that bicycles which are equipped with reflectorized tires on the front and rear need not be equipped with these side reflectors.

(c) No person shall sell or offer for sale a bicycle unless it is equipped with a red reflector, of a type approved by the department, on the rear of the bicycle.

(d) Area reflectorizing material meeting the requirements of Section 25500 may be used on a bicycle.

21202. KEEP TO RIGHT

(a) Any person operating a bicycle upon a roadway at a speed less than the normal speed of traffic moving in the same direction at such time shall ride as close as practicable to the right-hand curb or edge of the roadway except under the following situations:

(1) When overtaking and passing another bicycle or vehicle proceeding in the same direction;

(2) When preparing for a left turn at an intersection or into a private road or driveway;

(3) When reasonably necessary to avoid conditions (including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes) that make it unsafe to continue along the right-hand curb or edge. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane;

(b) Any person operating a bicycle upon a roadway of a highway, which highway carries traffic in one direction only and has two or more marked traffic lanes, may ride as near the left-hand curb or edge of such roadway as practicable.

21203. HITCHING RIDES

No person riding bicycle, coaster, roller skates, sled or toy vehicle shall attach same or himself to any vehicle.

21204. RIDING ON BICYCLE

(a) No person riding a bicycle upon a highway shall ride other than upon or astri[illegible]ermanent and regular seat attached thereto.

(b) No operator shall allow a person riding as a passenger, and no person shall ride as a passenger, on a bicycle upon a highway other than upon or astride a separate seat attached thereto. If the passenger is a minor weighing 40 pounds or less, the seat shall have adequate provision for retaining the minor in place and for protecting the minor from the moving parts of the bicycle.

21205. CARRYING ARTICLES

Operator must keep at least one hand on handlebars when carrying package, bundle or article.

21207.5 MOTORIZED VEHICLES: PROHIBITED OPERATION

No motorized bicycle may be operated on a bicycle path or trail, bikeway, bicycle lane, equestrian trail, or hiking or recreational trail, unless it is within or adjacent to a roadway or unless the local authority or the governing body of a public agency having jurisdiction over such path or trail permits, by ordinance, such operation.

21208. BICYCLE LANES: BICYCLES

(a) Whenever a bicycle lane has been established on a roadway, any person operating a bicycle upon the roadway at a speed less than the normal speed of traffic moving in the same direction shall ride within the bicycle lane, except that such person may move out of the lane under any of the following situations:

(1) When overtaking and passing another bicycle, vehicle, or pedestrian within the lane or about to enter the lane if such overtaking and passing cannot be done safely within the lane.

(2) When preparing for a left turn at an intersection or into a private road or driveway;

(3) When reasonably necessary to leave the bicycle lane to avoid debris or other hazardous conditions;

(b) No person operating a bicycle shall leave a bicycle lane until the movement can be made with reasonable safety and then only after giving an appropriate signal in the event that any vehicle may be affected by the movement.

21209. BICYCLE LANES: MOTOR VEHICLES

Whenever a bicycle lane has been established on a roadway, any person operating a motor vehicle on such roadway shall not drive in the bicycle lane except to park where parking is permitted, to enter or leave the highway, or to prepare for a turn.

This section does not prohibit the use of a motorized bicycle in a bicycle lane; provided, that no person shall operate a motorized bicycle upon a bicycle lane at a speed greater than is reasonable or prudent having due regard for visibility and the traffic on, and the surface of, the bicycle lane, and in no event, in a manner which endangers the safety of bicyclists utilizing the bicycle lane.

21210. PARKING

No person shall leave a bicycle lying on its side on any sidewalk, or shall park a bicycle on a sidewalk in any other position, so that there is not an adequate path for pedestrian traffic. Local authorities may, by ordinance or resolution, prohibit bicycle parking in designated areas of the public highway, provided that appropriate signs are erected.

21717. BICYCLE LANES: MOTOR VEHICLE TURNING

Whenever it is necessary for the driver of a motor vehicle to cross a bicycle lane that is adjacent to his lane of travel to make a turn, the driver shall drive the motor vehicle into the bicycle lane prior to making the turn.

21804. PUBLIC OR PRIVATE PROPERTY

The driver of a vehicle about to enter or cross a highway from any public or private property, or from an alley, shall yield the right-of-way to all vehicles and bicycles approaching on the highway.

21966. BICYCLE LANES: PEDESTRIANS

No pedestrian shall proceed along a bicycle path or lane where there is an adjacent pedestrian facility.

22111. HAND SIGNALS

All required signals given by hand and arm shall be given from the left side of a vehicle in the following manner:

(a) Left turn - Hand and arm extended horizontally beyond the side of the vehicle.

(b) Right turn - Hand and arm extended upward beyond the side of the vehicle, except that a bicyclist may extend the right hand and arm horizontally to the right side of the bicycle.

(c) Stop or sudden decrease of speed signal - Hand and arm extended downward beyond the side of the vehicle.

REGISTRATION AND LICENSING

39000. BICYCLE DEFINED

"Bicycle", for the purposes of this division, means any device upon which a person may ride, which is propelled by human power through a system of belts, chains, or gears having either two or three wheels (one of which is at least 20 inches in diameter) or having a frame size of at least 14 inches, or having four or more wheels.

39001. LICENSES AND REGISTRATION FORMS

The department shall distribute bicycle license indicia and registration forms to all cities and counties which have a bicycle licensing ordinance. Such indicia shall be affixed to the front of the seat tube of the bicycle frame. Each indicia shall bear a unique license number and shall be permanently assigned to a bicycle.

Bicycle licenses shall be renewed uniformly throughout the state on January 1, of the third year following the year of registration, to begin January 1, 1979. Renewal of a bicycle shall be indicated by a supplementary adhesive device affixed parallel to and above or below the indicia with expiration date shown.

39002. LICENSE REQUIREMENT

(a) If a city or county has a bicycle licensing ordinance, no resident shall operate any bicycle on any street, road, highway, or other public property within the jurisdiction of such city or county, unless such bicycle is licensed in accordance with this division.

(b) Any bicycle not subject to the provisions of this division may be additionally regulated or licensed pursuant to local ordinance or may be licensed upon request of the owner.

(c) It is unlawful for any person to tamper with, destroy, mutilate, or alter any license indicia or registration form, or to remove, alter, or mutilate the serial number, or the identifying marks of a licensing agency's identifying symbol, on any bicycle frame licensed under the provisions of this division.

39003. ISSUANCE TO OWNER

If a city or county has or adopts a bicycle licensing ordinance or resolution, indicia and a copy of the registration form obtained from the department shall be issued to the owner by the city or county or other licensing agency designated by it.

BEST COPY AVAILABLE

39004. FEES

Each licensing agency may adopt rules and regulations for the collection of license fees. Revenues from license fees shall be retained by the licensing city or county and shall be used for the support of such bicycle ordinance and may be used to reimburse retailers for services rendered.

39005. RECORDS

Cities and counties having a bicycle licensing ordinance shall maintain records of each bicycle registered.

Records shall be maintained by the licensing agency during the period of validity of the license or until notification that the bicycle is no longer to be operated.

39006. INFORMATION REQUIRED UPON RETAIL SALE

(a) Each bicycle retailer and each bicycle dealer shall supply to each purchaser a pre-registration form provided by the licensing agency and shall include the following information: name of retailer, address of retailer, year and make of the bicycle, serial number of the bicycle if delivered to the purchaser in an assembled state, general description of the bicycle, name of purchaser, and address of purchaser. A copy of the pre-registration form shall be filled out and forwarded, by the purchaser, to the appropriate licensing agency within 10 days from the date of sale.

(b) For the purposes of this division, a bicycle dealer is any person who sells, gives away, buys, or takes in trade for the purpose of resale, more than five bicycles in any one calendar year, whether or not such bicycles are owned by such person. "Bicycle dealer' also includes agents or employees of such person.

39007. SERIAL NUMBERS

No bicycle retailer shall sell any new bicycle in this state unless such bicycle has legibly and permanently stamped or cast on its frame a serial number, no less than one-eighth inch in size, and unique to the particular bicycle of each manufacturer. The serial number only shall be stamped or cast in the head of the frame, either side of the seat tube, the toe plate, or the bottom sprocket (crank) housing.

39008. RECORDATION OF TRANSFER

(a) Whenever any person sells or otherwise disposes of a bicycle, he shall endorse upon the registration certificate previously issued for the bicycle a written transfer of same, setting forth the name, address, telephone number of the transferee, date of transfer, and signature of the transferer, and shall deliver the registration certificate, so endorsed, to the licensing agency within 10 days.

(b) Any person who purchases or otherwise acquires possession of a bicycle shall, within 10 days of taking possession, apply for the transfer of license to his own name.

39009. CHANGE OF ADDRESS

(a) Whenever the owner of a bicycle licensed pursuant to an ordinance of a city or county changes his address, he shall within 10 days notify the appropriate licensing agency of the old and new addresses.

(b) In the event that any bicycle indicia or registration form issued pursuant to the provisions of this division is lost, stolen, or mutilated, the licensee of such bicycle shall immediately notify the licensing agency, and, within 10 days after such notification, shall apply to the licensing agency for a duplicate license indicia or registration form. Thereupon the licensing agency shall issue to such licensee a replacement indicia or registration form upon payment to the licensing agency of the appropriate fee.

39010. EXISTING LICENSES

Bicycle licenses which have been issued pursuant to an ordinance of a city or county which is in effect on September 20, 1974, shall remain valid until their assigned expiration dates, but in no case any later than July 1, 1979.

39011. FINES

No fine imposed for any violation of an ordinance or resolution, which is adopted pursuant to this division, shall exceed Five Dollars ($5.00).

39012. IMPOUNDMENT

The licensing agency shall have the right to impound and retain possession of any bicycle in violation of the provisions of this division, and may retain possession of such bicycle until the provisions of this division are complied with. In addition, a fine may be imposed for any violation of this division pursuant to Section 39011.

39013. MOTORIZED BICYCLES: LICENSING REQUIREMENTS

The provisions of this division are applicable to motorized bicycles.

* * * * *

TURN TO NEXT PAGE FOR LISTINGS OF . . .
Authorized Bicycle Licensing Agents
and
Bike Licensing Department

MODEL TRAFFIC ORDINANCES*

concerning

Bicycle Registration

Registration Required

The Model Traffic Ordinance provides that no person who resides within this city shall ride or propel a bicycle on any street or upon any public way set aside for the exclusive use of bicycles unless such bicycle has been licensed and a license plate is attached thereto as provided herein. MTC #12-2 (1968)

Registration Agency

The Model Traffic Ordinance suggests that applications for registration should be made by and registration should be issued by the Chief of Police. MTO #12-3 (1968)

Application Form

The Model Traffic Ordinance requires application for a bicycle license to be made upon a form provided by the city. MTO #12-3 (1968)

Proof of Ownership

The Model Traffic Ordinance requires the Chief of Police to refuse to issue a license where he has reason to believe the applicant is not the owner of, or entitled to possession of the bicycle. MTO #12-4(b) (1968)

Inspection of Bicycles

The Model Traffic Ordinance provides that the Chief of Police, or an officer assigned such responsibility, shall inspect each bicycle before licensing the same and shall refuse a license for any bicycle which he determines is in unsafe mechanical condition. MTO #12-6 (1968)

Registration Plates or Tags

The Model Traffic Ordinance provides that upon issuing a bicycle license, the Chief of Police must also issue a plate or tag to be attached to the bicycle. MTO #12-5(a) (1968)

Attached to the Bicycle

The Model Traffic Ordinance provides that the plate shall be "firmly" attached to the center seat bar of the bicycle so as to be "plainly visible from the rear." MTO #12-5(b) (1968)

Identifying Number

The Model Traffic Ordinance has no provisions concerning the use of numbers or identifying insignia.

---

*Source: Yourtown, U.S.A., (n.d.).

Record Keeping

The Model Traffic Ordinance provides that the Chief of Police shall keep a record of the number of each license, the date issued, the name and address of the person to whom issued, and the number on the frame of the bicycle for which issued, and a record of all bicycle license fees collected by him. MTO #12-4(c) (1968).

Duration and Renewal

The Model Traffic Ordinance provides for annual license fee and MTO #12-4(a) provides that licenses "shall be effective until (the next succeeding first of July) with enacting municipalities having the choice of selecting another expiration date.

Transfer of Ownership

The Model Traffic Ordinance provides that upon sale or other transfer of a licensed bicycle, the licensee shall remove the license plate and shall either surrender the same to the Chief of Police or may upon proper application but without payment of additional fee have said plate assigned to another bicycle owned by the applicant. MTO #12-8 (1968).

LEGAL ISSUES

ATTACHMENT F

MODEL REGULATIONS DEVELOPED IN AN NHTSA CONTRACT

IDENTIFICATION AND DEVELOPMENT OF COUNTERMEASURES FOR BICYCLIST/ MOTOR-VEHICLE PROBLEM TYPES

RICHARD D. BLOMBERG
ALLEN HALE

DUNLAP AND ASSOCIATES, INC.
ONE PARKLAND DRIVE
DARIEN, CONNECTICUT 06820

PRELIMINARY
Subject to Revision

CONTRACT NO. DOT-HS-7-01726
CONTRACT AMOUNT $328,209

VOLUME III
MODEL REGULATIONS

PRELIMINARY
Subject to Revision

AUGUST 1981
FINAL REPORT

THIS DOCUMENT IS AVAILABLE TO THE U.S. PUBLIC THROUGH THE
NATIONAL TECHNICAL INFORMATION SERVICE,
SPRINGFIELD, VIRGINIA 22161

PREPARED FOR:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
WASHINGTON, D.C. 20590

BEST COPY AVAILABLE

I. INTRODUCTION

A. General Considerations

Of the three principal classes of highway safety countermeasures, i.e., training programs, safety messages, and model regulations, this volume addresses the last class. This is a logical and desirable sequence of consideration in development as well as presentation. Control of behavior through regulation involves the threat of sanction for non-compliance. Philosophically, therefore, a regulatory approach to the countermeasure development process should be the consequence of exhaustive attempts in the training and safety message areas.

Measures to encourage voluntary performance of accident avoidance behavior are generally preferable. However, accounting for human predispositions, clearly some traffic behaviors need to be "regulated" to ensure both fairness and safety (e.g., use of traffic control devices at most intersections). The model regulations for bicycle safety proposed herein have thus been developed as countermeasures for aspects of bicycle accident situations considered unlikely to be totally responsive to training or safety message approaches.

Traffic regulations are considered to be any written statement which prescribes or proscribes the appearance, function or performance of traffic units (pedestrian, vehicle and vehicle driver) and/or elements of the traffic environment (highway/street, traffic control devices). The most common forms of traffic regulations are traffic laws which compose a state's vehicle code and the ordinances making up a county's or city's traffic code. In a broader sense, regulations could also embrace various safety standards (e.g., Federal Motor Vehicle Safety Standards), specifications (e.g., Society of Automotive Engineers), or rules promulgated by an empowered administrative authority (e.g., state traffic or highway commissioner).

The emphasis in this volume has been on the development of traffic laws and ordinances. The laws and ordinances proposed are, in fact, pieces of model legislation which are recommended for enactment by a state or municipality. Whether the model regulation is termed a law or an ordinance depends on its degree of specification and applicability. A model regulation is termed a law when its desired impact is "universal" and its provisions should be controlling statewide. Where the applicability or utility of a regulation is likely dependent upon distinctly local conditions or needs, it is termed an ordinance.

The model regulations recommended for legislative enactment are, for the most part, complete packages, expressed in good traffic regulatory language and ready for enactment. While the model regulations are enactable in their present form, the National Highway Traffic Safety Administration (NHTSA) in the past has been interested in limited field testing of developed model regulations before formally promulgating them to the appropriate prospective jurisdictions (see Hale, Blomberg and Preusser, 1978). This, however, does not necessarily preclude enactment of any of these model regulations in a jurisdiction where there is a clear need for such legislation.

B. Overview of the Products

Eight model regulations for bicyclist safety are presented in succeeding chapters of this volume. The regulations are entitled:

- Model Bicyclist Conspicuity Law
- Model Law for Bicyclist Position on the Highway
- Model Highway Entry Law
- Model Minimum Age Law for Bicyclists
- Model Driveway Parking Ordinance
- Model Law to Remove Visual Obstructions
- Model Regulation to Prohibit Riding Bicycles on Sidewalks
- Model Bicycle Safety Patrol and Violator Disposition Ordinance

A ninth potential regulation was considered, but not fully developed. The accident problem concerned bicyclists being struck by parallel motor vehicles which turn right without adequate warning (Bicycle Accident Type No. 24). The countermeasure approach considered was an ammendment to Federal Motor Vehicle Standard No. 108 which would *require* side turn signal lamps on all motor vehicles to provide better warning of a vehicle's impending right turn to a bicyclist alongside the vehicle. The relevant SAE Recommended Practice for Side Turn Signal Lamps is SAE J914b (July 1978). Within the confines of this study, a thorough engineering evaluation of SAE J914b (July 1978) was not possible insofar as its applicability to warning bicyclists. Any further development of this countermeasure approach would also necessarily have to consider ways and means to increase motorist use of turn signals.

For each of the eight regulations a description of the underlying accident problem is presented. Next, the basic approach to the writing of the model regulation is articulated. The actual provisions of the model regulation are then presented coupled with an annotation of each major provision. The annotation describes the logical and/or empirical rationale supporting each major provision of the regulation. Considerations for implementing the regulation are discussed including those related to legislative enactment, enforcement, public education and cost factors. Finally, where appropriate, a discussion is presented of possible approaches to a full scale field test of the model regulation along with any risk-benefit consequences.

The terminology employed in the wording of the model regulations basically follows that in Chapter 1 "Words and Phrases Defined" of the *Uniform Vehicle Code* (NCUTLO, 1979). That chapter is reproduced in Appendix A for the benefit of the reader. In addition, no concepts offered in these model regulations are intended to conflict with any of the provisions of the latest version of *Uniform Vehicle Code* (NCUTLO, 1979). In fact, many of those provisions are subsumed or specifically referred to in the description of the model regulations to follow.

There are some terms which needed to be developed for the content of these model regulations which were not explicitly defined in Chapter 1 of the Uniform Vehicle Code. These terms as well as other frequently used terms from the Uniform Vehicle Code appear in Figure 1, Words and Phrases Defined. Any specific enactment of these regulations should include those definitions from Figure 1 which are not currently operative in the particular jurisdiction and should be sensitive to any conflicts between these definitions and those which may be prevailing as a result of legislative action or legal intrepretation.

Within the body of some of the model regulations, certain words or phrases appear in parentheses. The parenthetical material may refer to any or all of the following:

- A description of a jurisdictional agency whose official designation should be inserted by the local jurisdiction.
- Optional language (generally more than one parenthetical statement) with the decision as to which version is selected left up to the local jurisdiction.
- Description of a local statute which should be ultimately cited in the manner indicated.

The need for these regulations and the definition of their scope were an outgrowth of reference to and detailed additional analysis of the bicycle/motor-vehicle accident data collected by Cross and Fisher (1977). In their landmark research effort, they collected in-depth data on numerous accidents, examined causal elements and identified 36 different types of bicycle/motor-vehicle crashes in seven broad classes (A to G). This typology, including the relative incidence of the types and their typical severity, formed the design basis for the Model regulations contained herein.

In the remainder of this volume, the various accident types identified by Cross and Fisher (1977) will be referenced by name and/or number. Quantitative references are not differentiated between data published by Cross and Fisher (1977) and subsequent additional analyses of their information for this study. As an aid to the reader, a brief description of each of the types, often with a pictorial representation, is presented in Appendix B. Those who have had no previous exposure to the work of Cross and Fisher (1977) should consider, as a minimum, becoming familiar with the contents of Appendix B before proceeding through the remainder of this report. All readers may find this Appendix a useful reference as the content of each regulation is perused.

WORDS AND PHRASES DEFINED

Bicycle--*Every (device) (vehicle) propelled solely by human power upon which any person may ride having two tandem wheels, except scooters and similar devices.*
Note: The term "vehicle" should be used if state law conforms with UVC § 1-184 which considers a bicycle as a vehicle.

Bicyclist--*Any person who drives, operates, rides or who is in actual physical control of a bicycle.*

Drive or Driving a bicycle--*Steering a bicycle, whether walking or riding it.*

Highway, street--*The entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel. (UVC § 1-122)*

Ride or Riding a bicycle--*Being astride a bicycle whether or not in motion.*

Roadway--*That portion of a highway improved, designed or ordinarily used for vehicular travel, exclusive of the sidewalk, berm or shoulder even though such sidewalk, berm or shoulder is used by persons riding bicycles or other human powered vehicles. (UVC § 1-158)*

Shoulder--*That portion of the highway contiguous with the roadway for use by bicyclists, pedestrians where no sidewalks exist, stopped motor vehicles and for lateral support of the roadway structure. The line between the roadway and the shoulder may be a painted edge line or a change in surface color or material.*

Sidewalk--*That portion of the highway which is contiguous with or near the roadway or shoulder, generally having a paved surface which is above the surface of the roadway and is intended principally for the use of pedestrians.*

Figure 1. Definitions of Important Words and Phrases.

II. GUIDELINES FOR REGULATION DEVELOPMENT

It is generally conceded that a program of traffic safety is dependent upon a foundation of sound traffic regulations made effective by appropriate levels of enforcement and public education. The development of these regulations is a multi-stage process which must begin with an enlightened understanding of the problem being attacked. Moreover, this understanding must not rest solely with any single group. It must be conveyed to both law makers, and the public to insure passage of an effective regulation and compliance with it by the public. Unfortunately, merely understanding the problem is not sufficient. Good laws must take into account such practical problems as enforcement, adjudication and public understanding if they are to achieve their desired goal or accident reduction.

Ideally, sound traffic regulations promote the *safe, expeditious and equitable* flow of all traffic units (motor vehicles, bicycles, pedestrians, etc.) upon the trafficway, accounting for the capacities and limitations in the capabilities of each unit. Therefore, traffic rules must be drafted so as to denote a "reasonable" regulation of traffic behavior while minimizing any attendant inconveniences. Since the penalties for traffic violations are less severe than those for criminal violations the "threat value" for traffic laws is overall lower than for criminal laws.

Traffic laws should have as much *self-apparent merit* as possible to promote voluntary compliance by the public. Self-apparent merit is manifest in a regulation whose intent and rationale are easily understood by the public without need for official "interpretation." However, the economy of expression demanded by traffic regulations does not always allow for a clear expression of the rationale. For this reason, and as an aid to legislative acceptance and enactment, it was necessary to "annotate" each provision of each model regulation contained within this report. The annotation succinctly describes the reasons for the regulatory provision and interconnection with the entire body of the regulation. Thus, the goal of "self-apparent merit" for model traffic regulations is quite important from the two principal standpoints of public acceptance, i.e., legislative enactment and public compliance. The importance of *voluntary* public compliance, engendered by a perception of reasonableness and value in the regulations, cannot be overemphasized. Police enforcement of all provisions of all traffic laws all of the time is obviously impossible.

Besides having self-apparent merit, traffic regulations must be *behaviorally realistic*. They must take account of human habits and inclinations in the traffic environment and existing traffic law. Where possible in accomplishing their purpose, traffic regulations should not conflict with population stereotypes or negatively transfer to provisions of existing, effective regulations.

The operational provisions of traffic regulations must be stated *simply and clearly*, without the need for interpretation of complex legal language, and employ as few qualifying clauses and exceptions as possible. The requirements (who or what is affected, what must be done or not done) and rationale (why's and wherefore's) for traffic regulations must be made apparent to the public preferably via the body of any regulation but certainly through supportive public information and education.

The need for clarity and simplicity also translates into the area of traffic law enforcement. Effective traffic regulations incorporate provisions which denote well defined elements of offenses which are amenable to objective and consistent law enforcement actions. Although certain necessary and difficult to enforce provisions may have "educational value" within the body of a regulation, inclusion of such items in model regulations should be the exception rather than the rule.

To promote compliance with and convenient enforcement of traffic regulations, consideration should be given to having the regulations specify "cues" to be installed in the traffic environment, whenever practicable, to evoke the driver and/or pedestrian behavior required by the regulation. Traffic control devices (i.e., signs, signals and pavement markings) are examples of methods for displaying cues for ensuring the performance of some required traffic behaviors. Traffic regulations whose provisions incorporate reasonable and acceptable traffic behavior cues will facilitate compliance and aid in enforcement by:

- Relieving drivers and pedestrians of the burden for total recall of the required or prohibited behaviors.
- Providing police with benchmarks and objective guidelines for taking enforcement action.

It has been the intent of the authors to adhere to the foregoing design criteria throughout the regulatory development process. The reader should keep this in mind when evaluating these products.

MODEL BICYCLIST CONSPICUITY LAW

§ 1 - Bicyclists to use conspicuous equipment

In addition to other equipment required by the laws of this state (or ordinances of this city), every person riding (or walking) a bicycle upon or across a roadway or shoulder shall have and display the equipment described in section 2.

§ 2 - Conspicuous equipment for use by bicyclists

[Pending the results of NHTSA sponsored research underway to study and propose conspicuous materials or devices for bicyclists and pedestrians, this section will likely describe:

(a) Appearance and performance parameters for the required items or any controlling federal, state or local standard(s).

(b) Acceptable method(s) for displaying the conspicuous materials or devices.

(c) Required usable condition for the conspicuous materials or devices.

(d) Times of day for using various equipment, as appropriate.]

Figure 2. Model Bicyclist Conspicuity Law.

MODEL LAW FOR BICYCLIST POSITION ON THE HIGHWAY

§ 1 - Bicyclist position on roadway

(a) A person driving a bicycle shall comply with __________ (state law comparable to UVC § 11-301) requiring all drivers to be on the right half of the roadway and shall not drive on the left facing traffic coming from the opposite direction except when authorized by that law.

(b) Except as provided in subsection (c), any person driving a bicycle upon a roadway at less than the normal speed of traffic at the time and place and under the conditions then existing shall travel as closely as practicable to the right-hand curb or edge of the roadway, or as closely as practicable to either curb or edge of the roadway when on a one-way street.

(c) Any person driving a bicycle may move away from the positions described in subsection (b) as necessary under any of the following situations:

(1) When overtaking and passing another bicycle or (other) vehicle.

(2) When preparing for a turn.

(3) When reasonably necessary to avoid conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, vehicle doors that are or may open, bicycles, pedestrians, animals, surface hazards, or substandard width lanes, that make it unsafe to remain near the curb or edge of the roadway. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and an overtaking vehicle to travel safely side by side within the lane.

(4) When necessary to comply with lane use restrictions.

§ 2 - Bicyclist on shoulders

(a) A person driving a bicycle may travel on any shoulder except as provided in subsection (d).

(b) A person driving a bicycle (on a controlled-access highway) (or a highway with a speed limit in excess of 35 miles per hour) shall travel on the shoulder when the shoulder is:

Figure 3. Model Law for Bicyclist Position on the Highway.

(continued)

(1) At least six feet wide, and

(2) Paved with a surface that is as level and as smooth as the adjacent roadway, and

(3) The conditions in (1) and (2) exist for the next 300 feet to be traveled.

(c) Subsection (b) shall not apply:

(1) When overtaking and passing another bicycle or (other) vehicle on the shoulder.

(2) When preparing for a left turn.

(3) When reasonably necessary to avoid conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, vehicle doors that are or may open, bicycles, pedestrians, animals or surface hazards, that make it unsafe to continue on the shoulder.

(d) A person driving a bicycle on a shoulder shall travel only in the same direction as traffic in the adjacent lane.

§ 3 - Bicyclist use of sidewalks

(a) A person driving a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall yield the right of way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian.

(b) A person shall not drive a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, where such use of bicycles is prohibited by official traffic-control devices.

(c) A bicyclist traveling on a sidewalk or in a crosswalk shall have all the rights and duties applicable to a pedestrian under the same circumstances.

Figure 3 (continued). Model Law for Bicyclist Position on the Highway.

MODEL HIGHWAY ENTRY LAW

§ 1 - Stops before emerging from alley, driveway or building

The driver of a vehicle or bicycle emerging from an alley, building, private road or driveway shall stop immediately prior to moving onto a sidewalk or onto the sidewalk area extending across such alley, building entrance, road or driveway, and shall stop at the point nearest the roadway to be entered where the operator has a view of approaching traffic thereon. After each stop, the driver of a vehicle or bicycle shall look for any approaching traffic.

§ 2 - Yield to traffic on sidewalks

The driver of a vehicle or bicycle crossing a sidewalk shall yield the right of way to any pedestrian and all other traffic on the sidewalk.

§ 3 - Yield to traffic on roadway or shoulder

The driver of a vehicle or bicycle about to enter or cross a roadway or shoulder from any place other than another roadway or shoulder shall yield the right of way to all traffic approaching on the roadway or shoulder to be entered or crossed.

Figure 4. Model Highway Entry Law.

146

MODEL MINIMUM AGE LAW FOR BICYCLISTS

§ 1 - Persons under nine years of age

A parent or guardian having custody of a child under nine years of age shall exercise such supervision over that child and over any bicycles or tricycles owned or used by members of the family as necessary to assure that:

(a) A child under seven years of age shall not use a bicycle or tricycle upon any roadway, shoulder, sidewalk, parking area, private road or driveway, unless the child is under the continuous and immediate supervision of a person at least (18) years of age;

(b) A child who is seven or eight years of age shall not use a bicycle or tricycle upon any roadway or shoulder unless he or she is under the continuous and immediate supervision of a person at least (18) years of age.

Failure on the part of a parent or guardian to exercise such supervision shall constitute a misdemeanor.

§ 2 - Persons nine or more years of age

A person who is nine, ten or eleven years of age shall not drive a bicycle on a roadway or shoulder unless he or she:

(a) Is under the continuous and immediate supervision of a person at least (18) years of age; or

(b) Has successfully completed a course approved by the (appropriate state or local agency).

Figure 5. Model Minimum Age Law for Bicyclists.

MODEL DRIVEWAY PARKING ORDINANCE

§ 1 - Parking across driveways permitted

Notwithstanding the provisions of ____________________ (insert citation to state law or local ordinance comparable to UVC § 11-1003 (a) (2) (a) (1968)), a person may park a vehicle in front of a driveway serving a single occupancy dwelling unit (as a means of discouraging bicyclists from riding down the driveway into the street) if that person displays identification meeting the requirements specified under § 2.*

§ 2 - Identification requirements

The (appropriate police agency) shall specify a format for an identification placard to be placed in plain view on any vehicle which is parked in front of a driveway in accordance with § 1. At a minimum, this identification placard shall include the address at which parking across a driveway is permitted and shall bear the signature and telephone number of the owner or current occupant of the dwelling unit served by the driveway.

§ 3 - When parking across driveways prohibited

A person shall not park a vehicle in front of a driveway without displaying the identification placard for that location nor in violation of other prohibitions, restrictions and limitations on stopping, standing or parking vehicles.

**This section forbids standing or parking a vehicle "in front of a public or private driveway."*

Figure 6. Model Driveway Parking Ordinance.

MODEL LAW TO REMOVE VISUAL OBSTRUCTIONS

§ 1 - Duty to remove visual obstructions

(a) It shall be the duty of the owner of real property on which any tree, plant, shrub, or any moveable object unreasonably obstructs the view of any driver, pedestrian or bicyclist proceeding along a highway and thereby constitutes a potential traffic hazard to eliminate such a visual obstruction.

(b) When the (state highway commission) or any local authority determines upon the basis of an engineering and traffic investigation that such a potential traffic hazard exists, it shall notify the owner and order that the hazard be removed within 10 days.

(c) The failure of the owner to remove such traffic hazard within 10 days of the notice required in subsection (b) above, shall constitute an offense punishable by a penalty of __________ dollars and every day said owner shall fail to remove it shall be a separate and distinct offense.

(d) It shall be the duty of the (state highway commission) and the (city traffic engineer) to comply with subsection (a) above as to visual obstructions located on public property.

§ 2 - Inspection for visual obstructions

The (state highway commission, traffic engineer) shall inspect (quarterly, semi-annually, annually) the highways and bicycle paths of this (state, county, city) to identify obstructions which impair a driver's view of the official traffic control devices or pedestrian, bicycle or vehicular traffic.

Figure 7. Model Law to Remove Visual Obstructions.

MODEL REGULATION TO PROHIBIT RIDING BICYCLES ON SIDEWALKS

§ 1 - Authority to prohibit bicycle riding on sidewalks

(a) The (traffic engineer, traffic commissioner) may prohibit riding bicycles on any sidewalk when an engineering and traffic investigation determines such riding would be unsafe.

(b) Any prohibition against riding a bicycle on a sidewalk adopted under this section shall be effective only when indicated by official traffic control devices.

§ 2 - Bicyclist to comply with signs

A person driving a bicycle shall obey the instructions of any official traffic control device authorized by § 1.

Figure 8. Model Regulation to Prohibit Riding Bicycles on Sidewalks.

MODEL BICYCLE SAFETY PATROL AND VIOLATOR DISPOSITION ORDINANCE

§ 1 - Bicycle safety patrol established

(a) There is hereby established in the (traffic division of the) police department of this city a bicycle safety patrol under the control and supervision of an officer appointed by and directly responsible to the chief of police.

(b) Members of the bicycle safety patrol shall meet minimum qualifications specified by the chief of police.

(c) Members of the bicycle safety patrol shall (wear uniforms and) carry badges of their office as may be specified by the chief of police.

§ 2 - Duties of bicycle safety patrol

It shall be the duty of the bicycle safety patrol to:

(a) Enforce the traffic laws of this state and city pertaining to the duties of persons using bicycles;

(b) Make arrests, issue citations or warnings for violations of laws pertaining to the duties of persons using bicycles;

(c) Assist in the investigation of accidents involving persons using bicycles;

(d) Implement ways and means to improve bicycle safety; and

(e) Carry out those duties specifically imposed upon the patrol by the ordinances of this city or by the chief of police.

§ 3 - Power to stop, warn, cite violators

(a) A member of the bicycle safety patrol is authorized to stop and warn or issue a citation to any person he or she has observed violating a law or ordinance pertaining to the duties of persons using bicycles. As to any violator who is less than 16 years of age, a copy of the citation or any warning shall be mailed or delivered to a parent or guardian of the violator.

Figure 9. Model Bicycle Safety Patrol and Violation Disposition Ordinance.

(continued)

(b) Any person stopped pursuant to this section shall, upon request by the patrol member, identify himself or herself by providing his or her full name, address, age and telephone number. If the person is less than 16 years of age, the person shall also provide the name and address of his or her parent or guardian.

§ 4 - Trial of violators

(a) The adjudication of any person receiving a citation from the bicycle safety patrol under this ordinance shall be conducted by:

(1) The traffic court if the violator is 16 or more years of age.

(2) The juvenile court if the violator is less than 16 years of age.

(b) In lieu of trial by a judge (magistrate), the court by its rules may authorize the trial of bicycle users by a (hearing officer, peer court, ________, ________, ________) provided that a person found guilty shall have the right to appeal to the court for a trial de novo.

(c) As to any violator who is less than 16 years of age, his or her parent or guardian shall be present at the trial or other proceeding. Any parent or guardian who fails to comply with an order of the court shall be guilty of a misdemeanor.

§ 5 - Punishment of violators using bicycles

Any person convicted of using a bicycle in violation of the laws of this state or the ordinances of this city shall be punished by a fine of not more than $ ____. In addition to, or in lieu of this penalty, the court may require attending and satisfactorily completing a bicycle safety education course, impound the bicycle for not more than ___ days, prohibit using a bicycle on the streets for not more than ___ months, or performing or refraining from performing such acts as may be ordered by the court.

Figure 9 (continued). Model Bicycle Safety Patrol and Violation Disposition Ordinance.

Who Should Enforce?

There are many options insofar as who enforces the road rules for bicyclists, and successful enforcement programs have been built around each of these. Several basic alternatives, including advantages and disadvantages, are discussed below. Attachment A to this section, taken from the Minnesota Community Planning Kit, also discusses alternatives, along with other issues pertinent to enforcement planning.

The Entire Police Force

One option is simply to have all uniformed police officers incorporate active bicycle law enforcement into their regular patrol duties. This usually would not entail any special patrolling on bicycle, unless such was already standard practice in the department. This approach clearly has the greatest potential for a broad-based enforcement effort, and implementation costs are minimal. However, there may be some problem in stimulating and maintaining the interest of the police officers to the degree necessary to effect a real change in enforcement policy towards bicyclists.

To overcome this, some police departments using this approach have established quotas for the number of tickets, warnings, etc. that an officer must issue to bicyclists each week. For example, the officer in charge of the Santa Barbara Police Department bicycle enforcement program has stated that one reason he feels his program worked was that one ticket per week was required from each officer (1). While other police departments have not found the quota system necessary, they generally agree that motivation is a problem and that some special effort must be made to maintain active involvement from the police officers. Some possibilities here might include regular update reports on the status of bicycle enforcement activities (number citations issued, etc.), a bulletin board display plotting the number of bicycle accidents in the community, opportunities for officers to discuss informally particular problems encountered during enforcement, etc. Also, all of the materials used during any orientation to the enforcement program, such as the Ride on By film and information from the Cross and Fisher (2) study should periodically be reviewed.

A positive step that can be taken in this situation is to provide some "hands-on" training for the regular officers. One approach would be to let police officers (or others in the community) who are experienced bicyclists ride with members of the police force who are not experienced. This allows these officers to get a feel for the difficulties cyclists have in various traffic situations.

Police Bicycle Squad

A second enforcement alternative is to designate one or more officers on the police force to more or less serve full-time as bicycle patrols (i.e. a bicycle squad). The bicycle officer himself is the most likely candidate for this position, but depending on the size of the community and the extent of its commitment to bicycle law enforcement, other officers may need to assist in this area. This is the situation, for example, in Davis, California, where the bicycle officer patrols regularly on bicycle but where other police officers can also be called upon to join him as needed. Des Plaines, Illinois, also relies primarily on its bicycle officer to meet enforcement needs.

Obviously such an approach circumvents some of the problems in terms of training and motivation that one faces if the entire police force is asked to assume responsibility for bicycle enforcement. Overall program administration and records keeping may also be simplified. On the other side of the coin, however, there will undoubtedly be some loss of coverage for the program, particularly if the bicycle officer's responsibilities in other areas (such as program administration, adjudication, or education) severely limit the time that he can devote to active patrolling. Still, this approach has proven effective for some communities and would appear particularly promising for smaller communities having one or two police officers strongly committed to bicycle safety.

Civilian Bike Patrol

A third alternative and one that has been tested extensively by communities in Minnesota, Illinois and Michigan is to hire and train young persons, generally college students, to form a special "bike patrol." In most cases the bike patrol is limited to the summer months when bicycle riding is at its peak. These civilians spend the major part of their time actively patrolling the community on bicycle, but can also assist in other aspects of a bicycle safety program. For example, bicycle patrollers in Richfield, Minnesota

> warn bicyclists and write bicycle tickets, warn pedestrians about violations, conduct violator seminars, conduct summer park bicycle education, make bulletin boards, displays and booths about bicycle safety, mail seminar letters to parents, file tickets, keep track of the number of tickets for each juvenile, follow up on tickets with false information, keep track of seminar cancellations and reschedule people, maintain a list of stolen bicycles and check for stolen bicycles and other related duties (3).

There are many advantages to looking outside the police department for help in enforcing laws for bicyclists, not the least of these being the freeing of regular commissioned officers to respond to an already heavy workload. The young persons, particularly if they are uniformed and riding bicycles, and if they wear a bicycle safety helmet, serve as excellent role models for younger cyclists. They can provide extensive coverage of a community, and their daily routes and schedules can be adjusted to counteract specific bicycle safety "hot spots." Patrollers on bicycle lend visibility to the enforcement program and can play a vital role in fostering good relations between the community and the police department. Finally, motivational problems are minimal, and the overall number of contacts with the bicycle riding public is generally high. For example, the 20 Minnesota communities employing bike patrols during the summer of 1980 had a total of 81 patrols who worked 25,476 hours, making 22,867 enforcement contacts and issuing 3,163 tickets. Attachment B, taken from the Minnesota Bike Patrol Training Manual (4), contains sections on the scope of work, responsibilities, etc. of the patrollers, along with sheets pertaining to bike patrol evaluation criteria.

Along with these advantages there are, of course, some disadvantages associated with the use of civilian patrols. Operating costs are generally higher since additional funds are needed to pay for non-police personnel. In the past some communities have been able to reduce expenses by using CETA (Comprehensive Employment Training Act) and other federal government funds, but these will likely be unavailable in the future. Providing potential bike patrollers with the training necessary to carry out their duties can also place a hardship on the program, both in terms of additional monies required and the added demands on the bike officer or other person responsible for the patrol.

There are, however, sources to turn to for help. To assist its communities in training bicycle patrols, the Minnesota Community Bicycle Safety Program sponsors a week long Bike Patrol Training Workshop in June of each year. The workshop trains patrollers in teaching and enforcement techniques and familiarizes them with police procedures and their duties as members of the bike patrol. An outline for the training workshop is included as Attachment C. The Minnesota Program also holds a one-day workshop for community bicycle safety project staff to assist them in training bike patrols. Topics covered here include public relations, recruiting and hiring patrols, enforcement training for patrols, patrol supervision, and educational strategies for bike patrols. Attachment D contains a more detailed workshop outline.[1] Again, an excellent reference here is the Minnesota Bike Patrol Training Manual (4).

Another potential problem is the difficulty these young patrollers may have in contacts with older riders who may resent being approached by someone from the patrol. This is where the planning that effects community support becomes important.[2] Besides making the community aware of the need for the enforcement program, the violation contingences also need to be laid out, so that the older cyclist knows what to expect from this encounter. Decisions about what constitutes a warning or citation also need to be formulated, publicized and adhered to. (These are covered in the section entitled "What to Enforce.")

Two final points to consider if one is debating the use of bike patrols to enforce traffic laws for bicyclists are: (1) possible legal constraints on such "para-legal" police officers, and (2) the reaction of regular members of the police force to the patrol. Concerning the first, bike patrols have generally been found to be most effective when they are granted the authority to issue regular traffic citations as well as verbal and written warnings. However, this is sometimes prohibited by either state law or local ordinance (Michigan is an example). The legality of a patrol should be checked with the town legal officer at the outset of the program so that, if needed, some revisions can be made to the town ordinances.

Concerning the reaction of regular police force members to the patrol, our discussions with certain bicycle officers and others associated with bike patrols has revealed some tendency for police officers to resent the enforcement activities of the bike patrollers. This is an area where the bicycle officer, as a liaison between the two groups, can be particularly influential. Every effort should be made to keep regular police force members informed of the activities of the patrol. Having some of the officers work with the patrols, assisting in training, etc. should also yield beneficial results.

---

[1] Persons wishing to find out more about this aspect of the Minnesota program should contact Ms. Sherri Wagner, Community Bike Program Coordinator, 4-H Youth Development, University of Minnesota, St. Paul, Minnesota 55108 (Telephone 612-376-1369).

[2] See also the section on obtaining community support later in this manual.

Summary

The use of all uniformed police officers, one or two designated police officers, or para-legal bike patrols are the three major options available for addressing the "Who" of bicycle law enforcement. As noted at the outset of this section, all of these approaches have been used successfully. However, it may be that the most effective approach lies in a combination of these. For example, regular police officers might assume primary enforcement (and education) responsibilities during the school year, and be joined in their efforts by bike patrollers hired for the peak summer riding season. This is, in fact, typical of most communities using bike patrols. Having enforcement come from patrollers on bikes as well as police officers in squad cars would present a two-pronged attack on the problem that could prove highly effective. Also, the police officers' continued involvement in bicycle enforcement would lend credibility to the patrol's task.

The final decision as to who should enforce bicycle safety should only be made after carefully evaluating the needs and resources of the community and considering the attitude and operational procedures of the police department. We also suggest that the bicycle officer or other person responsible for making this decision contact directly some of the enforcement program personnel identified in this manual for helpful input. Names, addresses and telephone numbers of these persons are included in the descriptions of past and current programs (Section II).

References

1. Santa Barbara Police Department. Bicycle Enforcement Program. Report prepared for the California Office of Traffic Safety, October 1973.

2. Cross, K.D. and Fisher, G. A Study of Bicycle/Motor Vehicle Accidents: Identification of Problem Types and Countermeasure Approaches. Volume I. Washington, D.C.: National Highway Traffic Safety Administration, September 1977. (Contract No. DOT-HS-4-00982, Ref. PB 282 280).

3. Davis, J.E. Richfield Public Safety Department Bicycle Safety Program. Richfield, Minnesota: Department of Public Safety, (n.d.)

4. Minnesota 4-H Youth Development Office. Bike Patrol Training Manual. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

WHO ENFORCES

ATTACHMENT A

MINNESOTA COMMUNITY
PLANNING KIT
SECTION ON
ENFORCEMENT PLANNING

ENFORCEMENT

bicycle safety planning guide

the need to enforce bicycle traffic laws

Research data has shown that violation by bicyclists of basic traffic laws is the outstanding factor involved in bicycle accidents and that the bicycle rider is the principal cause of accidents! A California study of bicycle accidents showed that bicyclists involved in accidents knew they were breaking the law, but did it anyway.

A Minnesota study undertaken in 1972 found that bicyclists were at fault in 77% of the fatal bicycle accidents that year. In both Willmar and Richfield the most common violation is running stop signs. Others are illegal passengers, failure to signal, and riding on the wrong side of the street. Most violators are juveniles and most know the rules but say they "forgot" or "just didn't think."

Bicyclists seem to have the attitude that bicycle traffic laws do not apply to them. Even after instruction in bicycle safety, many kids and adults don't "bother" with hand signals and observation of traffic rules.

To be effective, bicycle safety rules must be *known and enforced*. There is clearly a need for enforcement of bicycle traffic laws. And, further, enforcement needs to be backed by a judiciary system to deal with violators.

Enforcement of bicycle safety laws can be difficult for several reasons:

1. The majority of bicyclists are young. In Richfield 30% of bicycle accidents in 1977 involved 6-year-olds. The idea of a 6-year-old bicyclist being stopped and issued a warning tag or a ticket is distasteful to most adults including police officers.
2. The "image" held by police themselves. Tagging bicycle violators is not worthy of their attention and time — it's seen as an added burden which is demeaning.
3. Fear of public criticism for "bothering little kids when they should be out 'fighting crime.'"
4. Fear of no judiciary backing for their enforcement efforts.

what does enforcement involve?

Public Relations

Because of the stigma attached to bicycle traffic law enforcement, enforcement personnel must be impressed with the importance and the seriousness of the bicycle safety enforcement effort.

A campaign to inform the community about the bicycle safety enforcement program can aid in soliciting public acceptance and protecting the image of the enforcing officers. This information should emphasize the necessity, and the positive nature of enforcement — that the enforcement program is a means of saving lives and improving the safety and enjoyment of bicyclists. It is not meant to threaten or frighten children, but to instill good safety habits which will carry over into adulthood, and hopefully, apply to driving motor vehicles.

This public relations campaign can also serve as the necessary advance warning to bicyclists that bicycle traffic laws are going to be enforced and violators tagged.

Fear of public criticism for enforcement efforts has not been warranted by existing programs. In Hastings, for example, after the safety officers made personal contacts and distributed literature to inform bicyclists about the ensuing enforcement program, they startd to issue tickets for violations. Issuing tickets resulted in fewer violations, a more serious attitude about bicycling, and praise rather than criticism for the enforcement program.

Enforcement Procedures

In most communities, police departments are primarily responsible for setting up an enforcement procedure and developing guidelines for citing offenders. This may involve drafting a city bicycle ordinance and taking it to the city council. Police departments, in most cases, carry the bulk of the responsibility for enforcement of bicycle safety laws; for patrolling the streets, issuing tickets and letters to parents, and sometimes conducting safety seminars, schools, or courts.

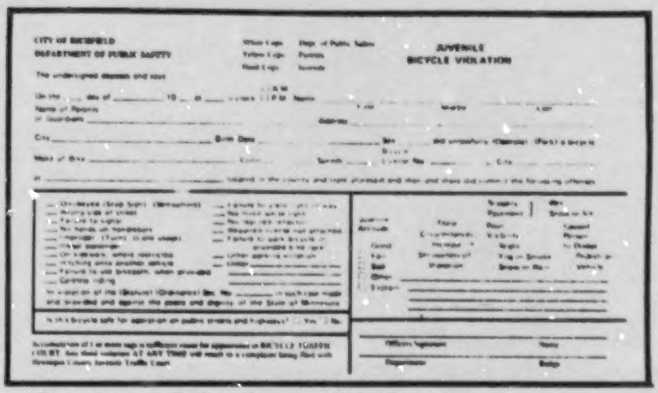
The method of enforcement varies from community to community. In Hastings, safety officers patrol the streets on bicycles, making personal contacts, and issuing verbal warnings and tickets. They also look for bicyclists who follow the laws for bicycling to award them "Right Rider" certificates.

The St. Cloud Police Department trains and employs high school age "cadets" to patrol the streets on motorcycles.

In Austin a bicycle patrol of sworn paid personnel is employed to enforce the Bicycle Ordinance. To reduce costs to the city, youth from the Neighborhood Youth Corps and the Governor's Summer Youth Program were selected to be patrol members and issue summonses.

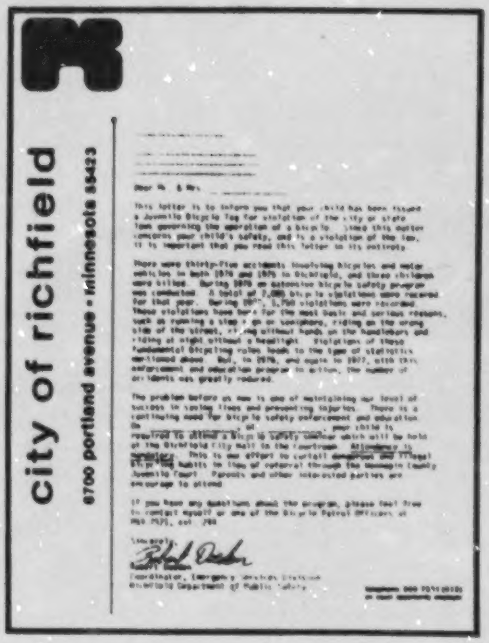
In Willmar on the first offense, the juvenile signs a promise to appear at bicycle safety school. Second offenders are required to attend bicycle safety school again and also to take, and pass with 100%, a written bicycle test. On a third violation, the county attorney draws up a petition which is sent to the parents who then must appear in juvenile court.

The Richfield Department of Public Safety employs and trains five full-time bike patrol officers who ride 10-speed bikes and enforce bicycle traffic laws. When they observe bicycle driving violations, they stop the drivers and issue tickets requiring attendance at a police bicycle seminar. Parents of juvenile offenders are notified of the violations by mail and required to have their child attend a bike safety seminar. Copies of the ticket and the letter to parents follow.



CITY OF RICHFIELD
DEPARTMENT OF PUBLIC SAFETY

JUVENILE
BICYCLE VIOLATION



city of richfield
6700 portland avenue • minnesota 55423

Seminars, Schools, and/or Courts

Often enforcement personnel are responsible for conducting the seminars, schools, clinics, courts for handling bicycle traffic law violators.

These sessions are designed to educate young bicyclists on bicycle traffic laws and safe driving procedures. The emphasis is on both learning and developing positive attitudes toward bicycle safety. Hopefully, one violation and one appearance at a safety seminar will increase awareness and improve riding practices so that subsequent penalties are unnecessary.

The seminars may also serve as a means of creating a better understanding of police work. Young people and their parents can see that law enforcemnt is meant to save lives, prevent injuries and make bicycling more safe and enjoyable.

Registration, Inspection, Licensing

Registration, inspection and licensing procedures are often within the scope of the enforcement component of a bicycle safety program. These tasks are sometimes carried out during bicycle rodeos, field days, and/or bike clinics. Often community organizations work with police departments at these events.

Administrative Duties

Bicycle safety enforcement programs necessitate certain administrative tasks such as recording and filing citations, correspondence, scheduling seminars, court sessions, and collecting and analyzing bicycle safety data. There is a need to assess the financial requirements of the program and to determine how the program can be funded.

Training Enforcement Personnel

Whether full time department employees, seasonal bicycle safety employees, or volunteers are enforcing bicycle traffic laws, they need some special training. Law enforcement academies need to consider bicycling and bicycle/automobile traffic mix in their training programs.

The bicycle patrol officers in Richfield receive 40 hours of training in the following areas:

bicycle safety procedures
state laws and local ordinances
bicycle maintenance and repair
first aid
public speaking
police-community relations
human relations
effective ticket writing
traffic court procedures
department regulations

This training is conducted by Richfield Police Department personnel and includes supervised on-the-job training.

assessing local enforcement needs

No two communities have the same enforcement needs. Unique traffic systems, population, bicycle usage, motorist attitudes, bicyclist attitudes, community leadership, local politics, funding and even climate all enter into the final decision on how to approach a local enforcement plan. The checklist below may be useful in assessing your unique community enforcement needs.

BEST COPY AVAILABLE

Do-It-Yourself Enforcement Program Exam*

Attitudes and Priorities

	Excellent	Average	Poor
Community leaders have commitment to bicycle safety	( )	( )	( )
Commitment to financial support	( )	( )	( )
Judicial support	( )	( )	( )
Public accepts need for bicycle enforcement	( )	( )	( )
Police officers accept need for program	( )	( )	( )
Local press responsive/supportive	( )	( )	( )

Bicycle Usage

Is bicycle usage confined to certain sections of the community such as near college campuses, in recreation areas, etc.? If so, list areas.

____

____

How many months out of the year is bicycle usage high? ( ) 2-4 months only ( ) 5-8 months ( ) Over 8 months

If use is seasonal, when does peak hit? _____________________

Is your bicycling group uniform (e.g., mostly students) or mixed? List groups and percentages Under 13 _____% Teenagers _____%

College _____% Adults _____%

How serious is your safety problem . . . have bicyclists been seriously injured or killed? If so, how many per year: _______ Is this number increasing: YES _______ NO _______

What are the main violations? (List those causing the greatest conflict, and accidents.)

____

Bicyclist/Motorist Attitudes

Do bicyclists significantly impede traffic flow? _____ Yes _____ No

Do motorists show courtesy to bicyclists sharing roadway?

_____ Excellent _____ Fair _____ Poor

Do bicyclists show courtesy to motorists sharing roadway?

_____ Excellent _____ Fair _____ Poor

Do bicyclists normally ride in a predictable pattern consistent with safe usage?

_____ Yes _____ No

Department Constraints

How much latitude does your agency have to develop its own programs?

_____ Low _____ Medium _____ High

Does your department have sufficient funding to take on a program? If so, how many dollars can be allocated? $_________

Is the allocation of staff time and funds currently consistent with safety requirements and needs? _____ Yes _____ No

If not, what changes should be made? _____________________

Does your agency have a positive public image? _____ Yes _____ No

Does your agency have a public relations program? If so, is it effective?

_____ Low _____ Medium _____ High

Using a public relations approach, would initiation of a bicycle enforcement program increase the positive image of your agency? _____ Yes _____ No

Local Development Steps

Local bicycling/motor vehicle mix laws have been updated within the past five years

_____ Yes _____ No

Laws are comprehensive, consistent, fair, adequate. _____ Yes _____ No

Laws are uniform with _____ County _____ State _____ Uniform Vehicle Code

Agency policy guidelines on bicycling have been developed/updated during the last five years. _____ Yes _____ No

Does your agency training academy include a section on the unique needs and problems of bicyclists? _____ Yes _____ No

Has your agency presented materials or held a workshop session for its officers and staff relating the needs of bicyclists? _____ Yes _____ No

Are your accident investigation forms adequate for reporting bicycle accidents?
_____ Yes _____ No

If so, how are these statistics used within your community?

____

Agency now has an adequate enforcement program. _____ Yes _____ No

Does the community have a bicycle ordinance? _____ Yes _____ No
If not, who will draft one and bring it to the city council?

____

---

*Bicycle Safety Atlas
Editor Vince Darago Urban Scientific & Educational Research, Inc., for National Highway Traffic Safety Administration, U.S. Consumer Product Safety Commission, January 26, 1978

establishing a plan for your bicycle safety enforcement programs

The enforcement group may need to survey police staff and community resources to identify individuals with specific interests and skills, existing enforcement efforts. This information often uncovers the need for special ordinances, new enforcement procedures, new assignments, and additional staff.

The planning process should result in a complete plan for the enforcement program starting with the drafting of a local ordinance.

Use the following questions as a guide to developing your bicycle safety enforcement plan:

1) What should be included in your local bicycle traffic ordinance?
2) What is the citing procedure? verbal warning, warning ticket, ticket and required appearance at safety seminar, parental notification, court appearance, fine, bicycle confiscation?
3) How will very young (8 years and under) violators be handled? verbal warnings only, parental notification?
4) How will adult violators be handled: Bicycle Traffic Court, Adult Traffic Court?
5) How are second and subsequent violators to be handled: Stiffer penalties, juvenile court?
6) How are parents of juvenile offenders involved in the enforcement procedures: voluntary involvement, required appearance at safety seminars, letters?
7) What procedures will be followed for: a) registration b) inspection c) licensing d) theft prevention, apprehension?
8) Having established an ordinance, how will its information be disseminated throughout the community?
9) What expenses will be involved?
10) How will the bicycle safety enforcement program be funded?

BEST COPY AVAILABLE

implementing the plan

Local bicycle ordinances establish the rules and to a certain extent the penalties for violations. But it is necessary to establish who will enforce the laws and what procedures will be followed. The following questions can guide implementation of your plan.

1. Who will enforce bicycle traffic laws? (police officers, sheriffs, bicycle patrols, state troopers)
   a) patrol the streets?
   b) conduct bicycle safety clinics, seminars, courts for violators?
   c) carry out public relations efforts? (example: make contact with schools, courts, community organizations, local media)

2. How will streets be patrolled? (on bikes, in squad cars, on motorcycles?)

3. Who will be responsible for administrative procedures such as:
   a) correspondence ______
   b) recording, filing citations ______
   c) scheduling court, seminar appearances ______
   d) collect and analyze bicycle safety data ______
4. What training is necessary for those people enforcing bicycle traffic laws?
   a) safety procedures ______
   b) state laws/local ordinances ______
   c) bicycle maintenance and repair ______
   d) first aid ______
   e) public speaking ______
   f) police-community relations ______
   g) human relations ______
   h) effective ticket writing ______
   i) traffic court procedures ______
   j) department regulations ______
   k) on-the-job training ______
   l) other ______
5. Who will be responsible for this training?

6. What materials/methods will be utilized?

7. How will trainees be selected? evaluated?

8. Where will this training occur?
   a) law enforcement academies
   b) local police departments
9. When will the bicycle safety enforcement program be initiated? terminated?

evaluation

It is important to assess program effectiveness in terms of local bicycle accident and violation statistics before and after the program was initiated.

It may be more revealing to assess the more subjective aspects of the enforcement program. For example, unsolicited letters, phone calls, interviews with child, teen, and adult bicyclists who participated in certain aspects of the program.

1. Summarize the accident statistics:

	This Year	**Last Year**	**2 Years Ago**
Number of total accidents	________	________	________
Number of total fatalities	________	________	________

Can any reduction in accidents be shown?

2. Summarize the enforcement efforts:

Number of warnings ________
Number of tickets issued ________
Number of seminar sessions held ________
Total seminar attendance ________
Number of repeating offenders ________
Number of referrals to juvenile court ________
Number registered ________
Number inspected ________
Number of stolen bikes ________
Number of stolen bikes recovered ________

3. How did offenders react to the seminar?

4. How did bicyclists react to the enforcing officers?

5. How did parents view the enforcement program?

6. How did other people in the community respond to the enforcement program? (letters, phone calls, requests for continuance, radio announcements, newspaper articles)

These materials were created for the Minnesota Department of Education Traffic Safety Education Unit funded by Highway Safety Project Grant 27-78-042 through Minnesota State Department of Public Safety and produced by Jenny Publishing Company, Minneapolis.

WHO ENFORCES

ATTACHMENT B

MINNESOTA BIKE PATROL TRAINING MANUAL SECTION ON PATROL RESPONSIBILITIES

CITY OF RICHFIELD, MINNESOTA*

BICYCLE PATROL OFFICER (FULL TIME SUMMER MONTHS)
DEPARTMENT OF PUBLIC SAFETY

NATURE OF WORK:

This is a position involving bicycle safety education, enforcement, research, analysis, and investigation. This position is responsible for promoting bicycle safety throughout the community. Also the position is responsible for stolen bicycle prevention, analysis of stolen bicycles, and investigation of stolen bikes. This position involves a high degree of exposure within the community.

MAJOR DUTIES AND RESPONSIBILITIES:

Organize and conduct bicycle safety seminars
Enforce bicycle safety rules by issuing citations while monitoring public streets
Analyze the cause of bicycle related traffic accidents
Process citations
Work with statistics in the development of the program
Analyze and investigate bicycle theft cases
Conduct on-going evaluation with regard to the effectiveness of the bicycle safety program

DESIRABLE KNOWLEDGE, SKILLS, AND ABILITIES:

Believe in bicycle safety
Knowledge of the law enforcement field
Ability to learn bicycle laws, safety procedures, first aid, maintenance and repair of bicycles, traffic court procedures, and department regulations
Ability to speak in front of large groups
An understanding of police-community relations
Ability to establish and maintain effective working relations with others
Ability to work without constant supervision

DESIRABLE TRAINING AND EXPERIENCE:

College course work in law enforcement or the behavioral sciences
Experience with making presentations to the general public
Experience relating to children

---

*Source: Minnesota Bike Patrol Training Manual.

SUPERVISOR EVALUATION OF BIKE PATROL

For each item rate the bike patrol on a scale of 1 through 5. Feel free to add other items that would help to describe the bike patrol's performance.

1.	Frequent laziness and/or tardiness	1 2 3 4 5	Uses time efficiently
	Justification:		
2.	Ineffective communication with public	1 2 3 4 5	Communicates openly and effectively with public
	Justification:		
3.	Unable to make appropriate and independent decisions	1 2 3 4 5	Makes appropriate independent decisions
	Justification:		
4.	Resist supervision	1 2 3 4 5	Willingly accept supervision
	Justification:		
5.	Interested in just finishing the assignment or putting in time	1 2 3 4 5	Concerned about quality of work
	Justification:		
6.	Usually a follower	1 2 3 4 5	Frequently initiates leadership activities
	Justification:		
7.	Do only what supervisor requires	1 2 3 4 5	Willing to assume additional responsibilities
	Justification:		
8.	Uncooperative	1 2 3 4 5	Works well with supervisor, police, staff and other bike patrols
	Justification:		
9.	Inappropriate use of authority	1 2 3 4 5	Appropriate use of authority
	Justification:		
10.	Lack of respect for Bike Patrol position	1 2 3 4 5	Respects Bike Patrol position

BIKE PATROL SELF-EVALUATION

For each item rate yourself on a scale of 1 through 5. You may justify your ratings be briefly describing what you would see if you were observing yourself in your bike patrol job. Feel free to add other items that would help to describe your performance.

1. Frequent laziness and/or tardiness 1 2 3 4 5 Uses time efficiently

Justification:

2. Ineffective communication with public 1 2 3 4 5 Communicates openly and effectively with public

Justification:

3. Unable to make appropriate and independent decisions 1 2 3 4 5 Makes appropriate independent decisions

Justification:

4. Resist supervision 1 2 3 4 5 Willingly accept supervision

Justification:

5. Interested in just finishing the assignment or putting in time 1 2 3 4 5 Concerned about quality of work

Justification:

6. Usually a follower 1 2 3 4 5 Frequently initiates leadership activities

Justification:

7. Do only what supervisor requires 1 2 3 4 5 Willing to assume additional responsibilities

Justification:

8. Uncooperative 1 2 3 4 5 Works well with supervisor, police, staff and other bike patrols

Justification:

9. Inappropriate use of authority 1 2 3 4 5 Appropriate use of authority

Justification:

10. Lack of respect for Bike Patrol position 1 2 3 4 5 Respects Bike Patrol position

WHO ENFORCES

ATTACHMENT C

MINNESOTA BIKE PATROL TRAINING WORKSHOP OUTLINE

BICYCLE PATROL TRAINING OUTLINE

I. Introduction

II. Bicycle Patrol Functions
   A. Enforcement
      1. How To Patrol
      2. Where To Patrol
      3. Bicycle Ticket Writing
      4. What To Say To The Bicyclist
      5. Writing The Ticket
      6. Situations That Might Be Encountered
      7. Bicycle-Traffic Laws

   B. Education
      1. Seminars
         a. content
         b. teaching tips
         c. discipline problems
      2. Bicycle Driving Tests
      3. Other Events
         a. summer school classes
         b. summer park programs
         c. special activities
      4. On-The-Street Instruction

   C. Record Keeping
      1. Tickets
      2. Mailing
      3. Seminar Lists
      4. File Tickets
      5. Seminar Cancellations
      6. Follow-up on Tickets with False Information
      7. Other Tasks

III. Bicycle Accidents
   A. Causes and Prevention
   B. Accident Diagrams

IV. Community Relations
   A. Professional Attitude
   B. Upset Citizen
   C. Off-Duty Hours

V. Radio Procedures
   A. General Guidelines

VI. Stolen Bicycles
   A. Maintain Stolen Bicycle Sheet
   B. If You Find A Stolen Bike
   C. How To Identify Stolen Bikes
   D. Locating Stolen Bicycles
   E. Bicycle Theft Prevention
   F. No Lock Tags

VII. Personnel
   A. Supervision Expectations of Bicycle Patrol
   B. Uniform/Bicycle
   C. Job Description
   D. Role of Bicycle Patrol

VIII. First Aid

WHO ENFORCES

ATTACHMENT D

MINNESOTA WORKSHOP ANNOUNCEMENT ON TRAINING BIKE PATROLS

* APRIL 30, 1981

*** BICYCLE ENFORCEMENT TRAINING WORKSHOP ***

In recent years many Minnesota communities have hired people for the express purpose of enforcing bicycle traffic laws. These "bike patrols" have complex jobs -- they need to be teachers, law enforcers, and public relations agents. Their duties include record keeping, correspondence, and planning and conducting bicycle safety events such as rodeos, violators' seminars, and bicycle trips and ourts besides patrolling and enforcing bike laws.

The need for providing training for these bike patrols came from communities which were implementing comprehensive bicycle safety programs. Responding to that need, a task force made up of police, teachers, youth workers, and bike patrols developed a one day workshop for police and bike patrol supervisors. This workshop was conducted in May 1980 and will be repeated on April 30, 1981.

WORKSHOP TOPICS

Public Relations
- establishing community support for your bicycle safety program
- making your own program visible

Recruiting and Hiring Bike Patrols
- job descriptions - bike patrols
- sources for employees
- interview procedures

Enforcement Training for Bike Patrols
- enforcement techniques
- police procedures
- ticket writing
- radio procedures
- first aid
- bike laws
- bike maintenance
- accidents

Supervision of Bike Patrols
- job description - supervisor
- scheduling/time keeping
- decision making
- recording activities, contacts
- roles: supervisor/worker
- responsibility/respect
- working with other police department staff
- continuing evaluation of bike patrols

Educational Strategies for Bike Patrols
- teaching techniques
- active learning
- working with different age groups
- role playing
- planning, conducting violators' seminars

WORKSHOP INSTRUCTORS

Jean Davis, Richfield P.D. - crime analyst & bike safety project director
Nick Wasylik, Hastings P.D. - juvenile officer & bike safety project director
Koni Porter, Brooklyn Park P.D. - juvenile officer & bike safety project director
Nancy Naujokas, Willmar P.D. - juvenile officer & bike safety project director
Diane Hedin, U of M - assistant director, Center for Youth Development & Research
Sherri Wagner, U of M - coordinator, community bike safety project

* Originally scheduled for April 24.

BEST COPY AVAILABLE

BICYCLE ENFORCEMENT TRAINING WORKSHOP

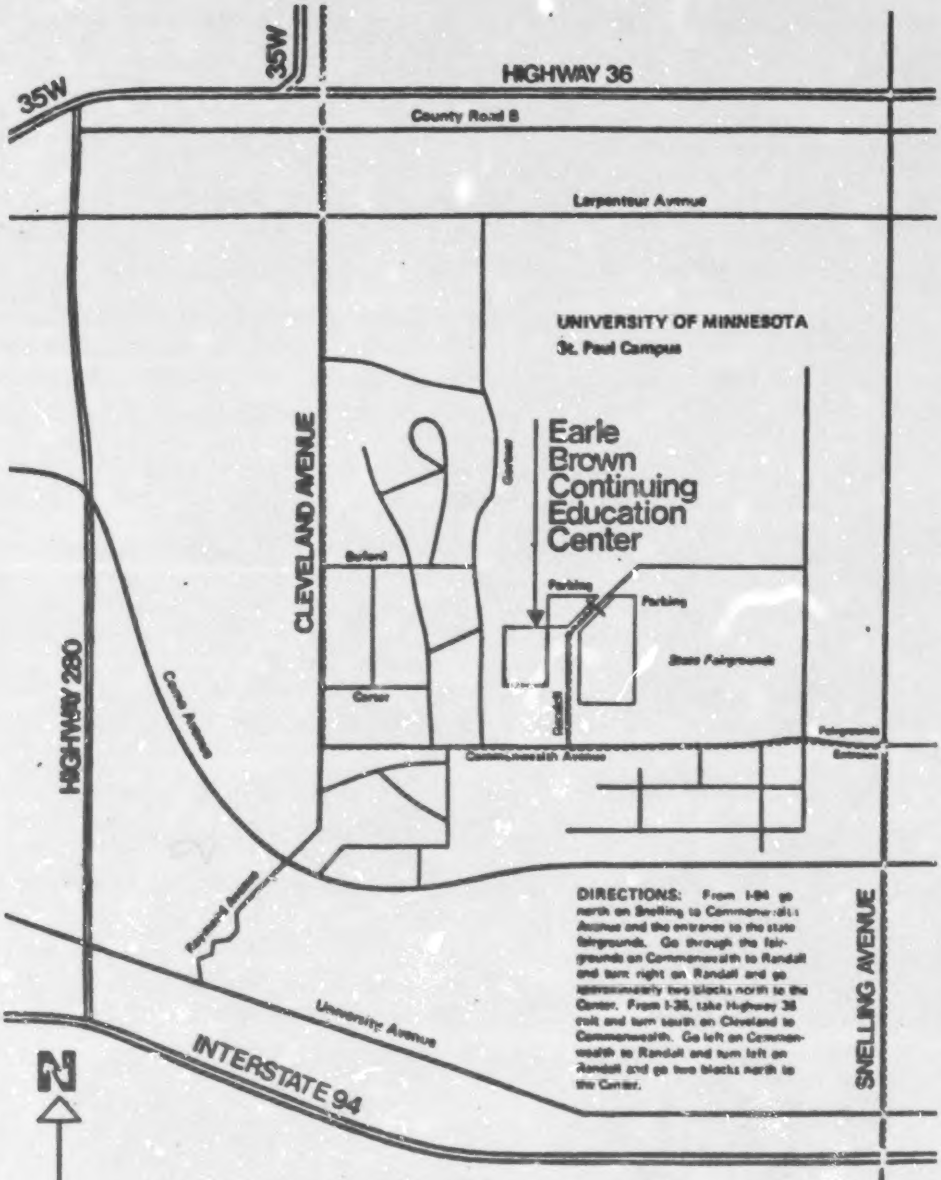
* April 30, 1981

Each community should send at least one person, preferably the person who will hire, train, and supervise the bike patrols. There is no charge to participants.

Please return the enclosed form(s) to Sherri Wagner by APRIL 15, 1981, at:

475 Coffey Hall
University of Minnesota
St. Paul, MN 55108

Directions to Earle Brown Center are as follows:


35W
35W
HIGHWAY 36
County Road B
Larpenteur Avenue
UNIVERSITY OF MINNESOTA
St. Paul Campus
Earle Brown Continuing Education Center
CLEVELAND AVENUE
Gortner
Buford
Carter
Parking
Parking
State Fairgrounds
Randall
Commonwealth Avenue
Fairgrounds Entrance
HIGHWAY 280
Como Avenue
Raymond Avenue
University Avenue
INTERSTATE 94
SNELLING AVENUE
N

DIRECTIONS: From I-94 go north on Snelling to Commonwealth Avenue and the entrance to the state fairgrounds. Go through the fairgrounds on Commonwealth to Randall and turn right on Randall and go approximately two blocks north to the Center. From I-35, take Highway 36 exit and turn south on Cleveland to Commonwealth. Go left on Commonwealth to Randall and turn left on Randall and go two blocks north to the Center.

BEST COPY AVAILABLE

What to Enforce

Selective Enforcement

Most programs of bicycle law enforcement are carried out with the goal of improving the riding behaviors of cyclists and, ultimately, reducing their likelihood of involvement in an accident. It makes sense then to concentrate one's enforcement efforts on those violations that have been shown to be accident producing -- in other words, to utilize selective enforcement.

There are many advantages to the selective enforcement of traffic laws for bicyclists. According to one source,

> Selective enforcement is one approach which has been reported to support the educational goals of enforcement, while helping to diffuse negative public opinion by relating the enforcement undertaken directly to dangerous cyclist practice. Selective enforcement takes less manpower, which helps in the face of the opinion that enforcement of bicycle traffic violations is a low priority. Selective enforcement programs have been initiated in various towns which aim only at certain classes of riders (e.g., adults, teens, youth) and within these categories, only at specific accident related violations. Selective enforcement can help sell an enforcement program to the police officers as they see a positive correlation between bicycle accidents and what they are being asked to do.(1)

Ideally a community's police department would develop its own guidelines for the selective enforcement of bicycle violations following a detailed analysis of its bicycle accident reports[1] and, if possible, on-the-road observations of bicyclists' behaviors. (These data could also be used as baseline data for later program evaluation.) It would also be helpful to have input from one or more police officers that have spent some time bicycling in the community, to incorporate their perceptions of hazardous riding practices and, equally important, potentially dangerous maneuvers by drivers of cars and other motorized vehicles. From these sorts of activities one could determine, for example:

- The ages of bicyclists most involved in accidents.
- Typical violations for different age groups.
- Areas in the community of heaviest bicycling activity.
- High accident locations.
- The time of day when accidents are most likely to occur, etc.

---

[1] The Highway Safety Research Center could assist North Carolina communities here, if needed, in the identification of case numbers for those accidents involving bicycles.

One could then proceed to develop an enforcement program specifically geared to the needs of the community.

Cross and Fisher Accident Data

A good basis for any selective enforcement program for bicyclists is the material derived from the Cross and Fisher investigation of 166 fatal and 753 non-fatal bicycle/motor vehicle accidents occurring in four sampling areas of the United States (2). Bicycle accident studies in various localities indicate that the Cross and Fisher data are representative. This material has been incorporated into several bicycle education/enforcement efforts, including the Santa Barbara program and the contract research by Dunlap and Associates, Inc. for NHTSA that pertains to the development of a fourth grade bicycle safety curriculum. It is also the basis for at least two recent educational films for young bicyclists produced by Fiesta Films, Inc. of Santa Monica, California.[1] (More film reviews may be found in the RESOURCE Section.)

Results from the Cross study showed male bicyclists to be involved in 71% of the non-fatal accidents and 85% of the fatal accidents investigated. The 10-15 year age group had the greatest percentage of accidents, although riders over the age of 35 were involved in a substantial proportion (18.2%) of the fatal crashes (see Figure 1). Concerning time of day the greatest peak in

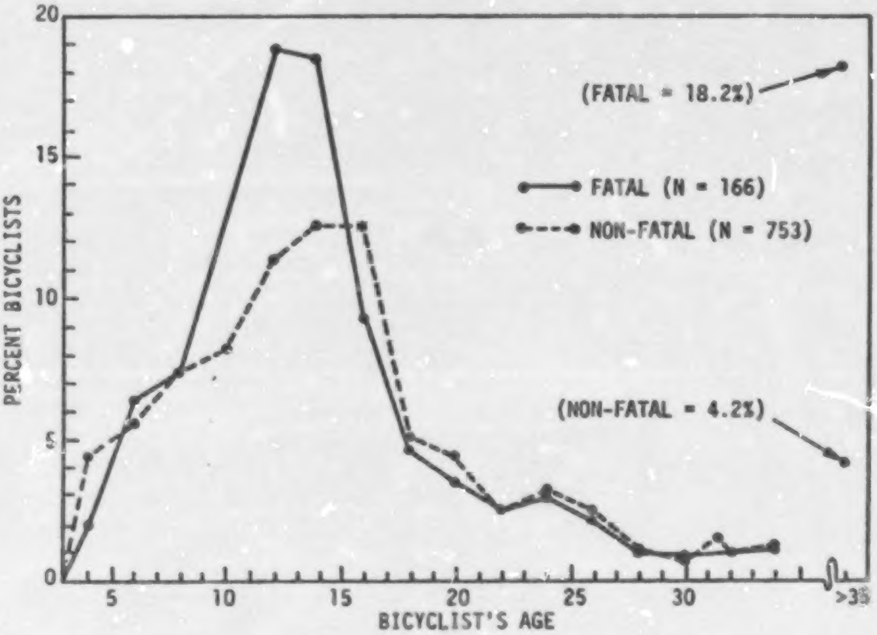


Figure 1. Bicyclist age distributions for fatal and non-fatal accident cases in the study sample.

---

[1] Bicycle Safety: The Beginning Years (for primary grades) and Bicycle Safety: Stop, Search and Assess (for elementary through adult). See RESOURCE section for ordering information.

accidents occurred from 3-7 p.m., with another much smaller peak occurring during the morning rush hours (7-9 a.m.). Bicycle accidents were not weighted towards weekend riding and, in fact, the frequency of non-fatal accidents was less on Saturday and Sunday than on any day of the week.

A major outgrowth of the Cross and Fisher study was the identification of six classes of bicycle/motor vehicle accidents which together accounted for 86% of the fatal and 89% of the non-fatal accidents investigated. These are briefly described below:

A. Bicycle rideout: driveway, alley, other midblock. This type of accident results from the bicyclist's entering a roadway at midblock from a driveway or alley or over a curb or shoulder. In almost all cases the bicyclist fails to slow or stop, or to first search for oncoming traffic. This pattern was characteristic of 15% of the fatal accidents investigated and 14% of the nonfatal accidents.

B. Bicycle rideout: controlled intersection. Here the bicyclist enters an intersection controlled by a sign and/or signal in an unsafe and usually unlawful manner. In most instances, no attempt is made to slow or stop for a stop sign, and in the case of a traffic signal the intersection is not cleared before the light changes to red. Twelve percent of all fatal and 17% of all nonfatal accidents in the Cross and Fisher study followed this pattern.

C. Motorist turn-merge/drive through/drive out. This category of accidents involves the motorist entering an uncontrolled roadway, either from a driveway or alley or from another controlled roadway at an intersection. The bicyclist is traveling perpendicular to the motorist on the uncontrolled roadway. In most all instances the motorist fails to observe the bicyclist, often due to the bicyclist's unexpected location on the roadway. For example, in over half of the accidents of this type, the bicyclist was operating on the wrong side of the roadway, facing traffic. Class C accidents characterize 19% of the nonfatal crashes, but only 2% of the fatal crashes (due to the usually low travel speed of the motor vehicle).

D. Motorist overtaking/overtaking threat. Included here are accidents where a motor vehicle overtakes a bicycle from the rear and collides with it, or where the threat of a motor vehicle overtaking causes the bicyclist to collide with an object in his path that he would ordinarily have avoided. The former is particularly characteristic of nighttime riding on narrow 2-lane rural roads, while the latter is exemplified by the bicycle-striking-parked-vehicle, bicycle-striking-opened-car-door patterns. This accident category does not include cases where the bicyclist turns or swerves into the path of an overtaking vehicle (see E below). Some 38% of all fatal bicycle accidents and 11% of all nonfatal bicycle accidents examined in the study followed this pattern.

all nonfatal bicycle accidents examined in the study followed this pattern.

E. Bicyclist unexpected turn/swerve. Accidents falling into this category occur when the bicyclist suddenly and without warning turns or swerves into the path of either an overtaking vehicle or a vehicle approaching from directly ahead. In almost all cases, even when the motor vehicle is approaching from ahead of the bicyclist, these accidents result from a search failure on the part of the bicyclist. This pattern appeared in 16% of the fatal and 14% of the nonfatal accidents investigated by Cross and Fisher.

F. Motorist unexpected turn. A final major category of bicycle/motor vehicle accidents incorporates those situations where the motorist makes an unexpected turn into the path of a bicycle either traveling in the same direction or approaching from straight ahead. These accidents typically result from a search failure on the part of the motorist, and in many instances by the bicyclist being in an unexpected location on the roadway. In the most frequent situation the motorist makes a left turn and collides with an oncoming bicycle. Also common is the situation where the motorist makes a right turn into the path of a bicycle traveling in the same direction along the right hand edge of the roadway, thus "cutting off" the bicyclist. Collisions of these sorts comprised 2% of the fatal and 15% of the nonfatal crashes investigated.

G. Other. Eleven other patterns of bicycle/motor vehicle accidents occurred relatively infrequently and were grouped into a final category. These include head-on collisions where the bicyclist is traveling on the wrong side of the roadway (2% fatal, 4% nonfatal) and crossing collisions at uncontrolled intersections with the motorist and bicycle on perpendicular paths (1% fatal, 3% nonfatal).

Each of these major accident classes was further subdivided into three to six subtypes. Attachment A at the end of this section contains diagrams of the accident subtypes within the classes, while Attachment B provides a summary of these important study results.

As a result of this research, the following seven bicyclist violations were identified by Cross as most likely to result in an accident:

- Bicyclist enters a roadway from a driveway, alley, or over a curb or shoulder without slowing or stopping for traffic on the roadway.
- Bicyclist rides into intersection against traffic control device (stop sign, yield sign, traffic signal).
- Bicyclist rides on the wrong side of the roadway, facing traffic.

- Bicyclist rides on sidewalk where prohibited by local ordinance.
- Bicyclist rides at night without lawful lighting equipment.
- Bicyclist initiates left-hand turn without signaling or searching for approaching motor vehicles.
- Bicyclist attempts to pass motorist on the right or left at a roadway junction.

According to Cross, law enforcement officers "should be particularly conscientious in citing or otherwise admonishing bicyclists who violate these critical laws!"

Along this same line, the NHTSA has produced two pamphlets (3,4) in draft form that also emphasize these recurring violations or accident types. While these pamphlets have not been tested for clarity, utility, etc., they are presented as examples of literature that will be available from NHTSA in the not-too-distant future. More Bicycles More Accidents? is geared specifically to law enforcement officials, while Another Way to Love Your Children is meant to provide parents and other adults with educational information that can hopefully promote the safety of young children. More Bicycles More Accidents? is reproduced in its entirety as Attachment C to this section.

By combining information from the Cross investigation with whatever data can be compiled on bicycle accidents and usage in one's own community, one should be able to devise an approach to bicycle law enforcement that is both effective and efficient in terms of yielding the greatest benefits for the resources available. And, as noted earlier in this section, such a program should be readily acceptable to the police force and community alike.

Enforcement Guidelines

Besides developing a selective enforcement program, some decisions must be made concerning procedures for enforcement. The Minnesota Bike Patrol Training Manual (5) contains relevant information on how to patrol, where to patrol, bicycle ticket writing, what to say to the bicyclist, and situations an enforcement officer might encounter. These suggestions are contained in Attachment D. In addition, the State of Wisconsin has published a model policy and procedure guideline (6). The section on enforcement guidelines is contained in Attachment E. A variety of violations are listed, followed by recommendations concerning whether the violator should be arrested or warned for the specific violation. Although communities may differ in their selected enforcement procedures, the above two references should provide excellent guidance in formulating the procedure.

References

1. Darago, V.S. Regional Workshops on Bicycle Safety Presentations, Participant Problems, Programs and Ideas, and Recommendations. Washington, D.C.: Urban Scientific and Educational Research, Inc., September 1978 (Contract No. DOT-HS-7-01798).

2. Cross, K.D. and Fisher, G. A Study of Bicycle/Motor Vehicle Accidents: Identification of Problem Types and Countermeasure Approaches. Volume I. Washington, D.C.: National Highway Traffic Safety Administration, September 1977. (Contract No. DOT-HS-4-00982, Ref. PB 282 280).

3. Minnesota 4-H Youth Development Office. Bike Patrol Training Manual. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

4. National Highway Traffic Safety Administration. Another Way to Love Your Children (Contract No. DOT-HS-7-01726). Washington, D.C.: Author (n.d.).

5. National Highway Traffic Safety Administration. More Bicycles More Accidents (Contract No. DOT-HS-7-01726). Washington, D.C.: Author (n.d.).

6. Wisconsin Council on Traffic Law Enforcement. Model Policy and Procedure Guidelines. Madison, Wisconsin: Division of Highway Safety Coordination, (n.d.).

WHAT TO ENFORCE

ATTACHMENT A

PROMINENT ACCIDENT TYPES IDENTIFIED IN THE CROSS AND FISHER STUDY

PROBLEM CLASS A--BICYCLE RIDEOUT: DRIVEWAY, ALLEY, AND OTHER MID-BLOCK

		FATAL (N=166)	NON-FATAL (N=753)
TYPE 1	BICYCLE RIDEOUT: RESIDENTIAL DRIVEWAY/ALLEY, PRE-CRASH PATH PERPENDICULAR TO ROADWAY	6.7%	5.7%
TYPE 2	BICYCLE RIDEOUT: COMMERCIAL DRIVEWAY/ALLEY, PRE-CRASH PATH PERPENDICULAR TO ROADWAY	2.4%	3.2%
TYPE 3	BICYCLE RIDEOUT: DRIVEWAY/ALLEY APRON, PRE-CRASH PATH PARALLEL TO ROADWAY	2.4%	2.5%
TYPE 4	BICYCLE RIDEOUT: ENTRY OVER SHOULDER/CURB	3.6%	2.5%
TOTAL CLASS (N: FATAL = 25; NON-FATAL = 105)		15.1%	13.9%

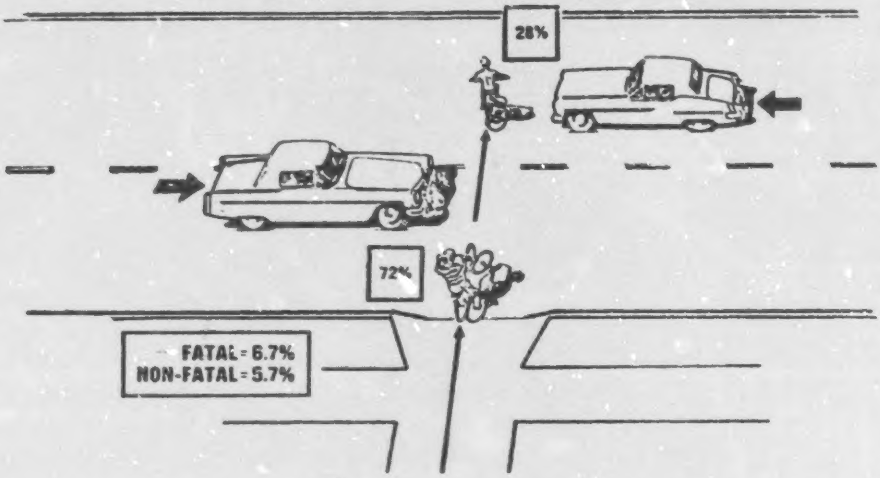


Illustration of Problem Type 1, *Bicycle Rideout: Residential Driveway/Alley, Pre-Crash Path Perpendicular to Roadway.*

BEST COPY AVAILABLE

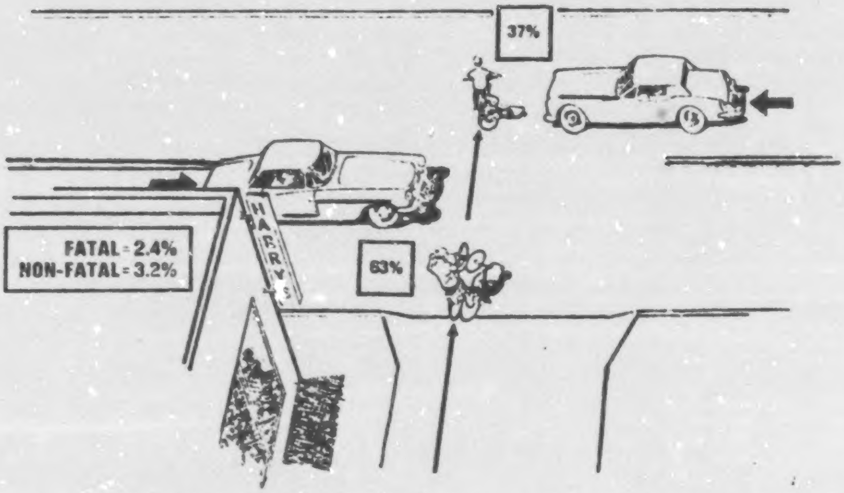


Illustration of Problem Type 2, *Bicycle Rideout: Commercial Driveway/Alley, Pre-Crash Path Perpendicular to Roadway.*

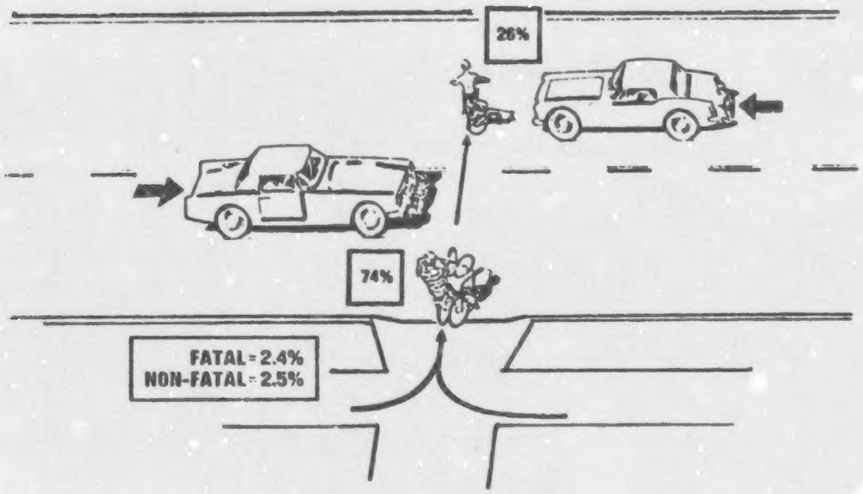

26%
74%
FATAL = 2.4%
NON-FATAL = 2.5%

Illustration of Problem Type 3, *Bicycle Rideout: Driveway/ Alley, Pre-Crash Path Parallel to Roadway.*

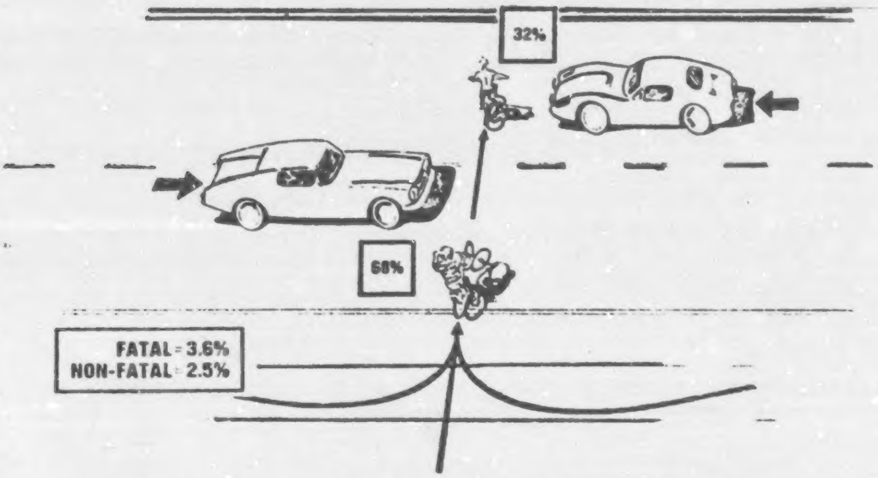

32%
68%
FATAL = 3.6%
NON-FATAL = 2.5%

Illustration of Problem Type 4, *Bicycle Rideout: Entry Over Shoulder/Curb.*

PROBLEM CLASS B--BICYCLE RIDEOUT: CONTROLLED INTERSECTION

		FATAL (N=166)	NON-FATAL (N=753)
TYPE 5	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGN	7.8%	10.2%
TYPE 6	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGNAL, SIGNAL PHASE CHANGE	.6%	3.1%
TYPE 7	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGNAL, MULTIPLE THREAT	2.4%	2.0%
OTHER CLASS B	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGNAL, OTHER	1.2%	1.7%
TOTAL CLASS (N: FATAL = 20; NON-FATAL = 128)		12.0%	17.0%

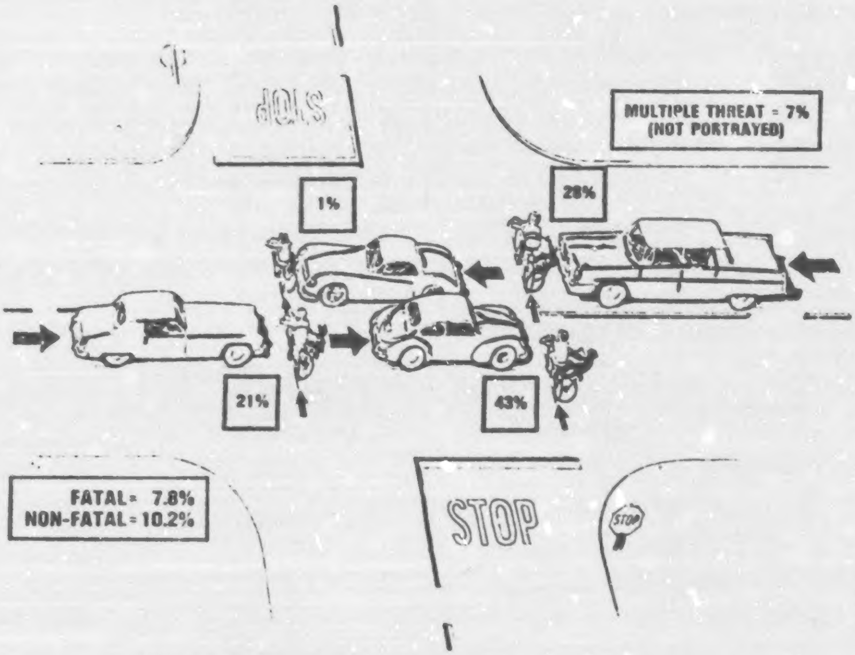

STOP
MULTIPLE THREAT = 7%
(NOT PORTRAYED)
1%
28%
21%
43%
FATAL= 7.8%
NON-FATAL= 10.2%
STOP
STOP

Illustration of Problem Type 5, *Bicycle Rideout: Intersection Controlled by Sign.*

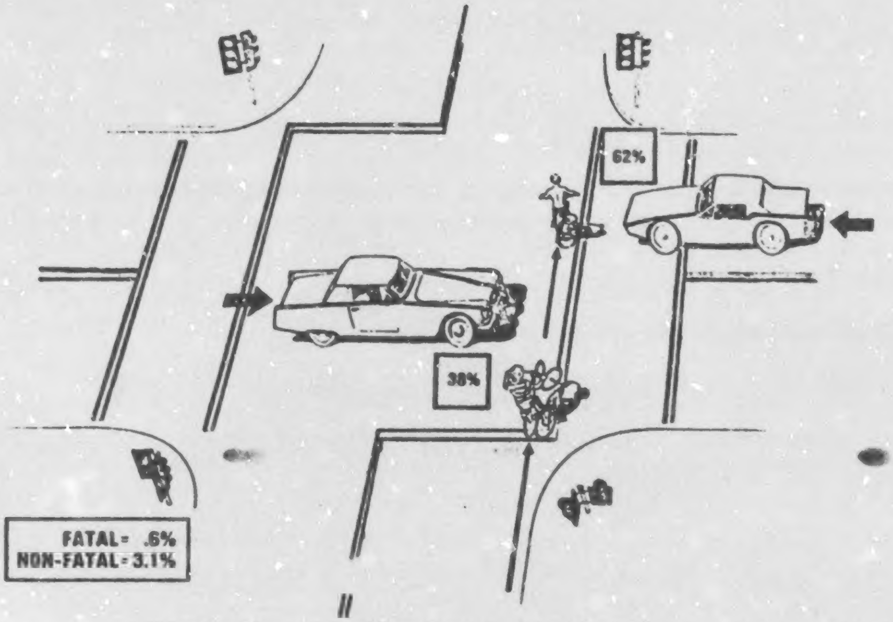

62%
38%
FATAL = .6%
NON-FATAL = 3.1%

Illustration of Problem Type 6, *Bicycle Ridcout: Intersection Controlled by Signal, Signal Phase Change.*

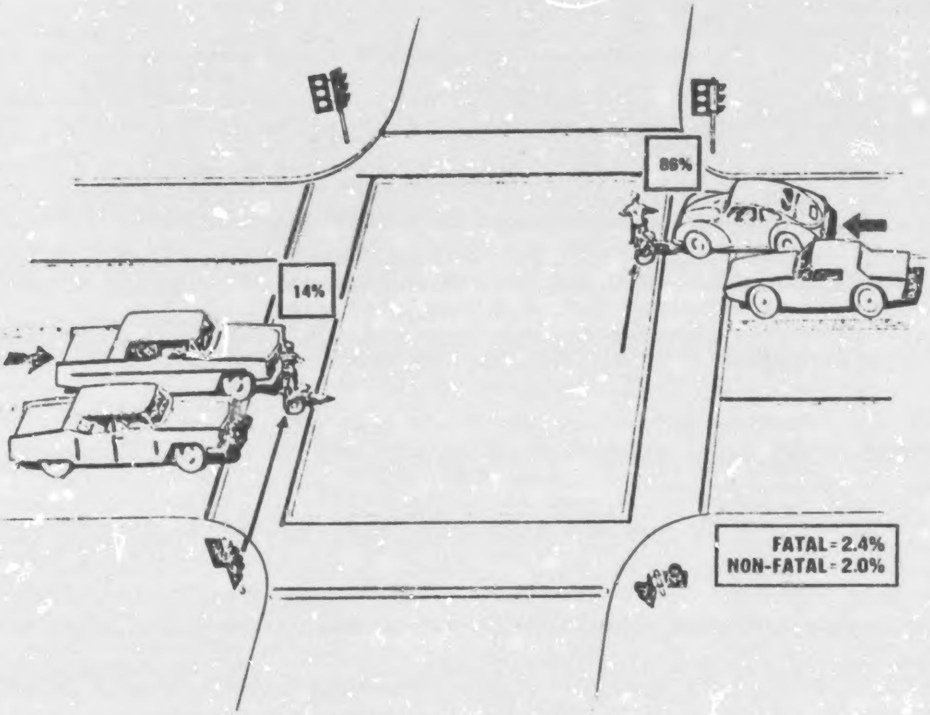

86%
14%
FATAL = 2.4%
NON-FATAL = 2.0%

Illustration of Problem Type 7, *Bicycle Ridcout: Intersection Controlled by Signal, Multiple Threat.*

PROBLEM CLASS C--MOTORIST TURN-MERGE/DRIVE THROUGH/DRIVEOUT

		FATAL (N=166)	NON-FATAL (N=753)
TYPE 8	MOTORIST TURN-MERGE: COMMERCIAL DRIVEWAY/ ALLEY	---	5.3%
TYPE 9	MOTORIST TURN-MERGE/DRIVE THROUGH: INTERSECTION CONTROLLED BY SIGN	1.2%	10.2%
TYPE 10	MOTORIST TURN-MERGE: INTERSECTION CONTROLLED BY SIGNAL	---	1.9%
TYPE 11	MOTORIST BACKING FROM RESIDENTIAL DRIVEWAY	---	.8%
TYPE 12	MOTORIST DRIVEOUT: CONTROLLED INTERSECTION	1.2%	.5%
TOTAL CLASS (N: FATAL = 4; NON-FATAL = 141)		2.4%	18.7%

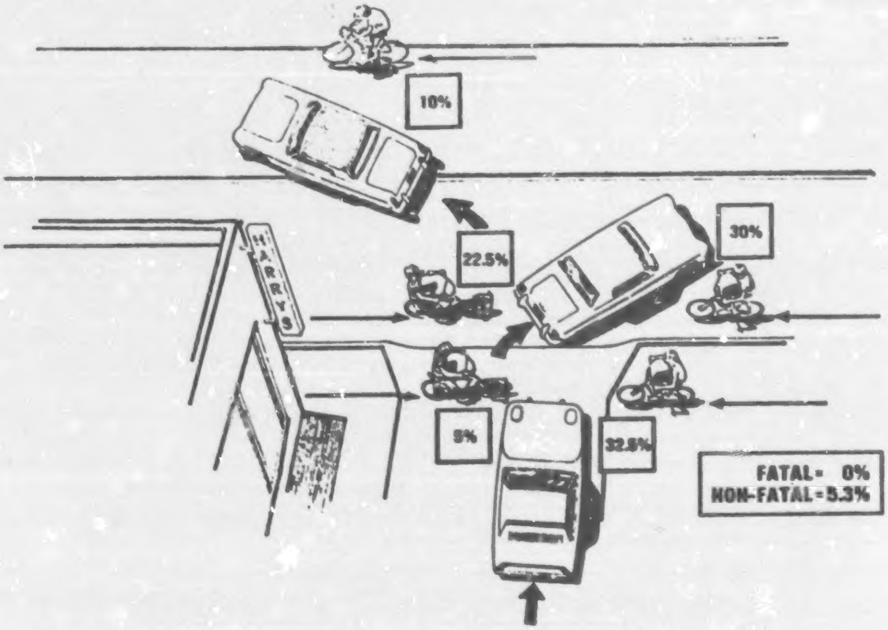


Figure 15. Illustration of Problem Type 8, *Motorist Turn-Merge: Commercial Driveway/Alley.*

(NOTE: The building was drawn in the above illustration to indicate that this type of accident occurs at the junction of a *commercial* rather than a residential driveway/alley. Although a building sometimes obstructed the operator's view in accidents of this type, buildings were not the most frequent type of obstructing object.)

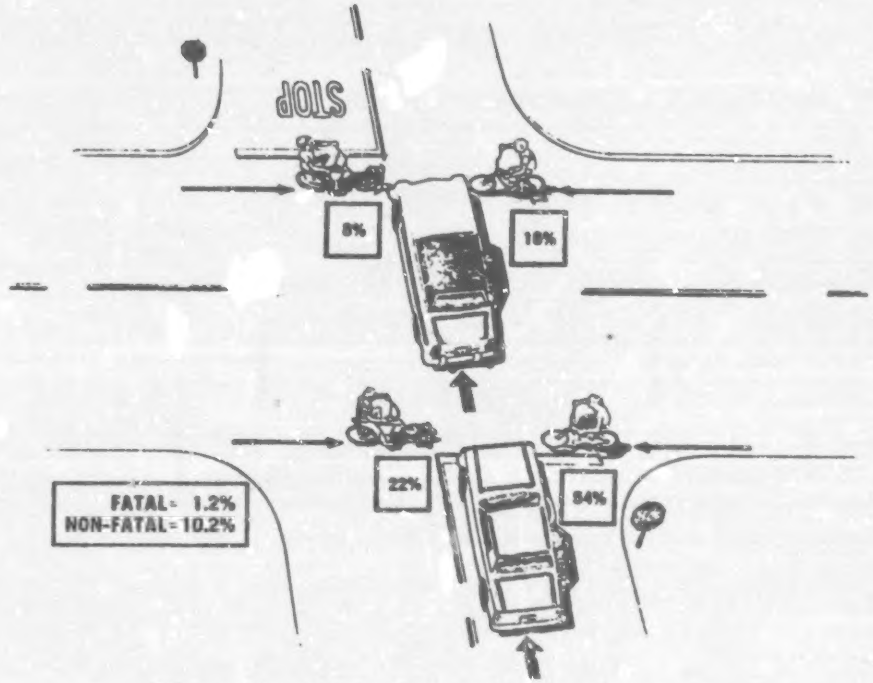

STOP
8%
16%
22%
54%
FATAL= 1.2%
NON-FATAL=10.2%

Illustration of Problem Type 9, *Motorist Turn-Merge/Drive Through: Intersection Controlled by Sign.*

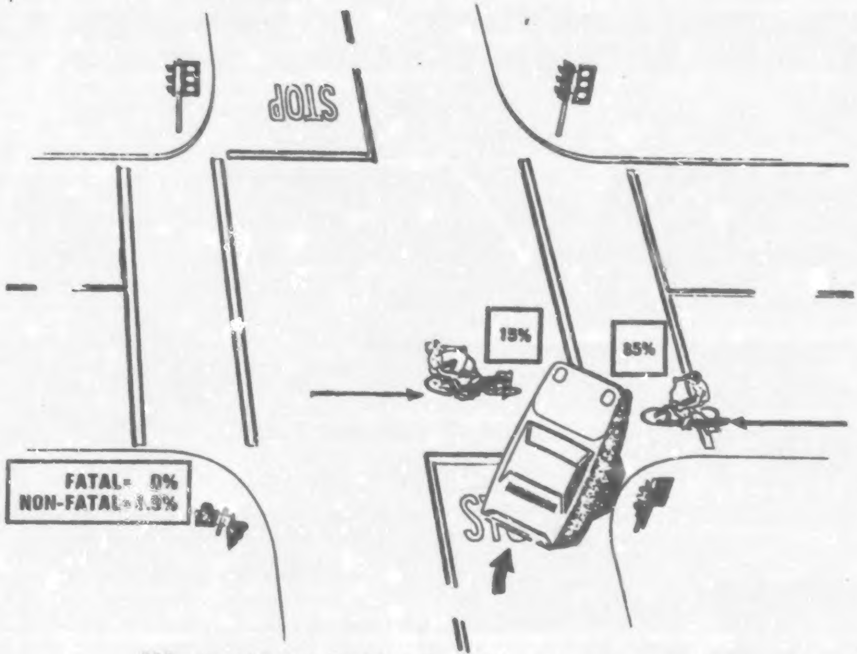

STOP
15%
85%
FATAL= 0%
NON-FATAL=1.3%

Illustration of Problem Type 10, *Motorist Turn-Merge: Intersection Controlled by Signal.*

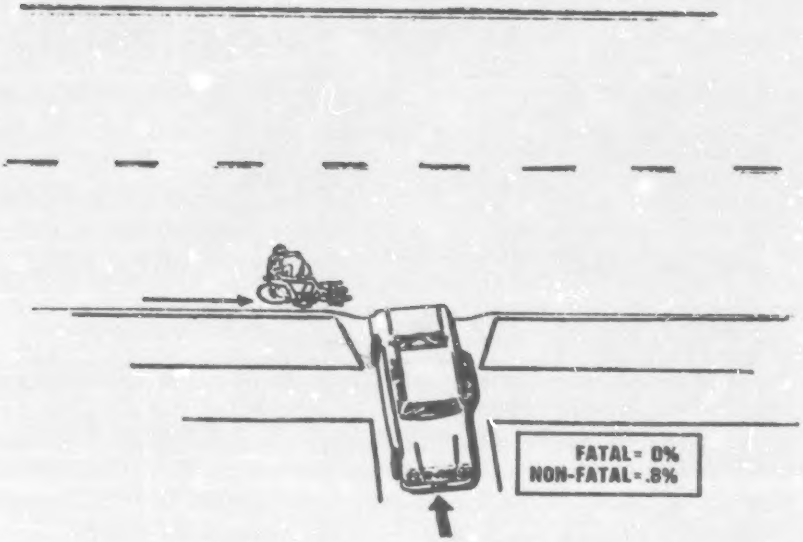

FATAL= 0%
NON-FATAL=.8%

Illustration of Problem Type 11, *Motorist Backing from Residential Driveway.*

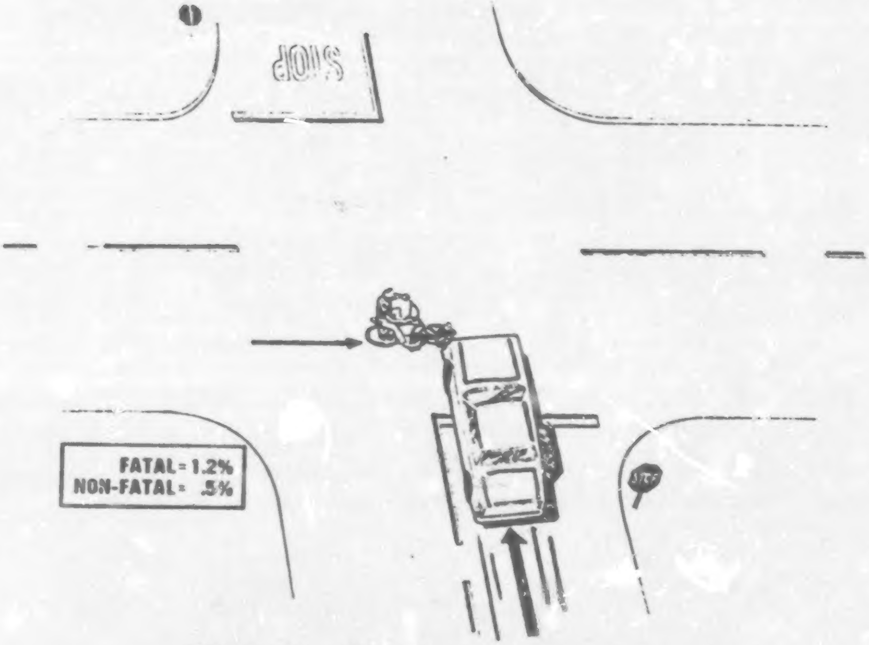

STOP
FATAL=1.2%
NON-FATAL= .5%
STOP

Illustration of Problem Type 12, *Motorist Driveout: Controlled Intersection.*

PROBLEM CLASS D--MOTORIST OVERTAKING/OVERTAKING-THREAT

		SUBTYPE		TYPE	
		FATAL	NON-FATAL	FATAL (N=166)	NON-FATAL (N=753)
TYPE 13	MOTORIST OVERTAKING: BICYCLIST NOT OBSERVED			24.6%	4.0%
	■ RURAL NIGHTTIME	9.0%	1.3%		
	■ RURAL DAYTIME	5.4%	.4%		
	■ URBAN NIGHTTIME	8.4%	1.3%		
	■ URBAN DAYTIME	1.8%	1.0%		
TYPE 14	MOTORIST OVERTAKING: MOTOR VEHICLE OUT OF CONTROL			4.2%	.7%
TYPE 15	MOTORIST OVERTAKING: COUNTERACTIVE EVASIVE ACTION			2.4%	1.7%
TYPE 16	MOTORIST OVERTAKING: MOTORIST MISJUDGED SPACE REQUIRED TO PASS			1.8%	2.0%
TYPE 17	MOTORIST OVERTAKING: BICYCLIST'S PATH OBSTRUCTED			.6%	2.0%
	■ BICYCLIST COLLIDED WITH OVERTAKING MOTOR VEHICLE	.6%	.8%		
	■ BICYCLIST COLLIDED WITH OBSTRUCTING OBJECT	---	.4%		
	■ BICYCLIST COLLIDED WITH OPENING MOTOR-VEHICLE DOOR	---	.8%		
TYPE UNKNOWN	MOTORIST OVERTAKING: TYPE UNKNOWN			4.2%	.1%
TOTAL CLASS (N: FATAL = 63; NON-FATAL = 79)		25.2%	6.0%	37.8%	10.5%

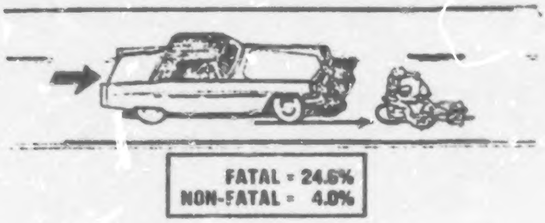


Illustration of Problem Type 13, *Motorist Overtaking: Bicyclist Not Observed.*

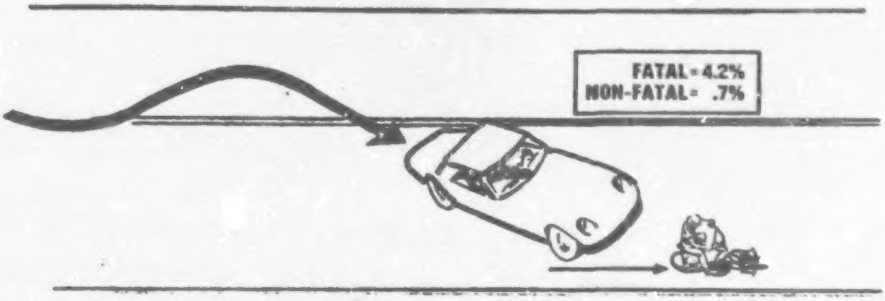


Illustration of Problem Type 14, *Motorist Overtaking: Motor Vehicle Out of Control.*

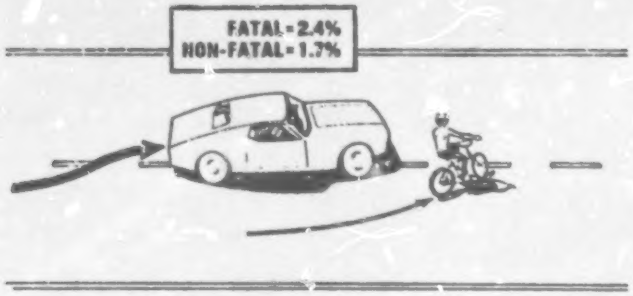

FATAL=2.4%
NON-FATAL=1.7%

Illustration of Problem Type 15, *Motorist Overtaking: Counteractive Evasive Action.*

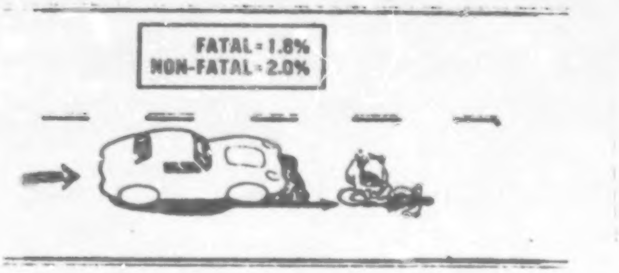

FATAL=1.8%
NON-FATAL=2.0%

Illustration of Problem Type 15, *Motorist Overtaking: Motorist Misjudged Space Required to Pass.*

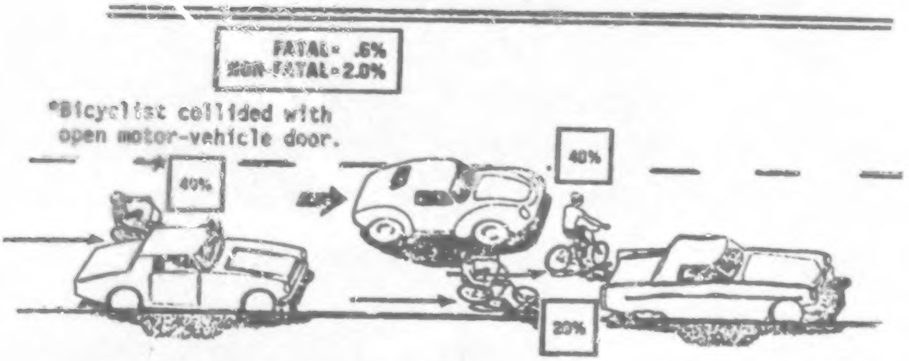
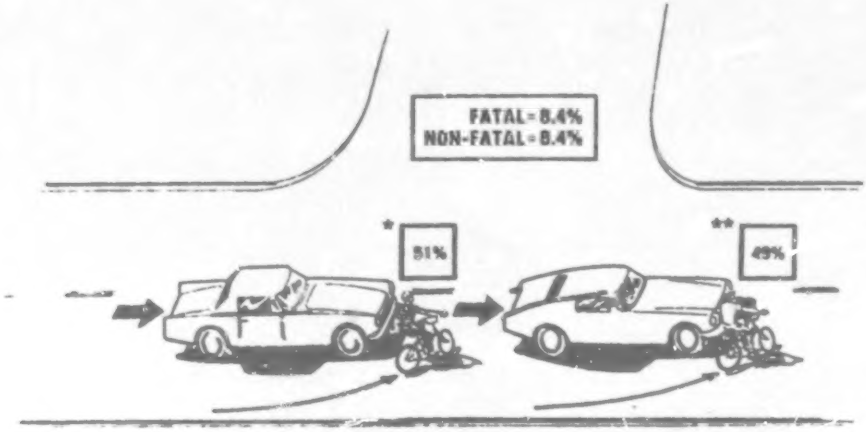

FATAL= .6%
NON-FATAL=2.0%
*Bicyclist collided with open motor-vehicle door.
40%
40%
20%

Illustration of Problem Type 17, *Motorist Overtaking: Bicyclist's Path Obstructed.*

PROBLEM CLASS E--BICYCLIST UNEXPECTED TURN/SWERVE

	FATAL (N=166)	NON-FATAL (N=753)
TYPE 18 BICYCLIST UNEXPECTED LEFT TURN: PARALLEL PATHS, SAME DIRECTION	8.4%	8.4%
TYPE 19 BICYCLIST UNEXPECTED LEFT TURN: PARALLEL PATHS, FACING APPROACH	3.0%	3.2%
TYPE 20 BICYCLIST UNEXPECTED SWERVE LEFT: PARALLEL PATHS, SAME DIRECTION (UNOBSTRUCTED PATH)	3.6%	1.5%
TYPE 21 WRONG-WAY BICYCLIST TURNS RIGHT: PARALLEL PATHS	1.2%	1.1%
TOTAL CLASS (N: FATAL = 27; NON-FATAL = 107)	16.2%	14.2%



*Bicyclist turned at junction.

**No junction nearby.

Illustration of Problem Type 18, *Bicyclist Unexpected Left Turn: Parallel Paths, Same Direction.*

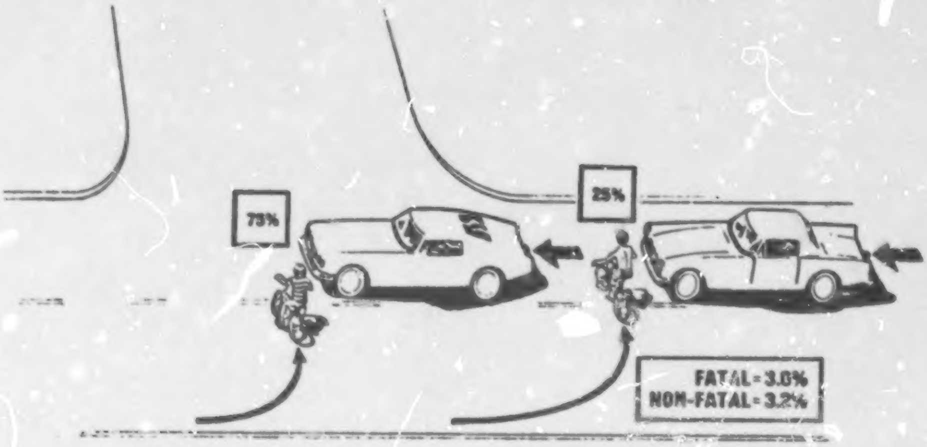

75%
25%
FATAL=3.0%
NON-FATAL=3.2%

Illustration of Problem Type 19, *Bicyclist Unexpected Left Turn: Parallel Paths, Facing Approach.*

(NOTE: Most, but not all, bicyclists initiated their left-hand turn at a point close to the right-hand edge of the roadway.)

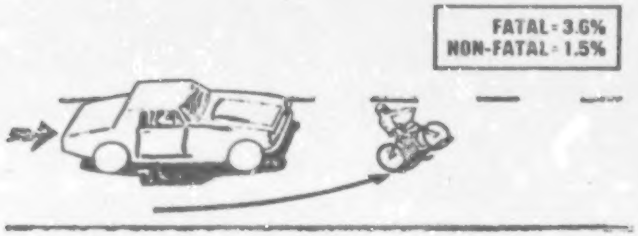

FATAL=3.6%
NON-FATAL=1.5%

Illustration of Problem Type 20, *Bicyclist Unexpected Swerve Left: Parallel Paths, Same Direction (Unobstructed Path).*

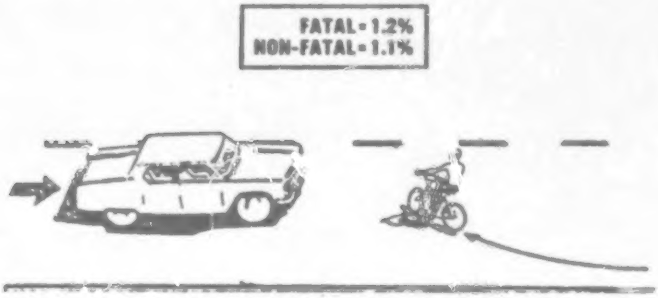

FATAL=1.2%
NON-FATAL=1.1%

Illustration of Problem Type 21, *Wrong-Way Bicyclist Turns Right: Parallel Paths.*

PROBLEM CLASS F--MOTORIST UNEXPECTED TURN

	FATAL (N=166)	NON-FATAL (N=753)
TYPE 22 MOTORIST UNEXPECTED LEFT TURN: PARALLEL PATHS, SAME DIRECTION	.6%	1.3%
TYPE 23 MOTORIST UNEXPECTED LEFT TURN: PARALLEL PATHS, FACING APPROACH	---	7.6%
TYPE 24 MOTORIST UNEXPECTED RIGHT TURN: PARALLEL PATHS	1.8%	5.6%
TOTAL CLASS (N: FATAL = 4; NON-FATAL = 109)	2.4%	14.5%

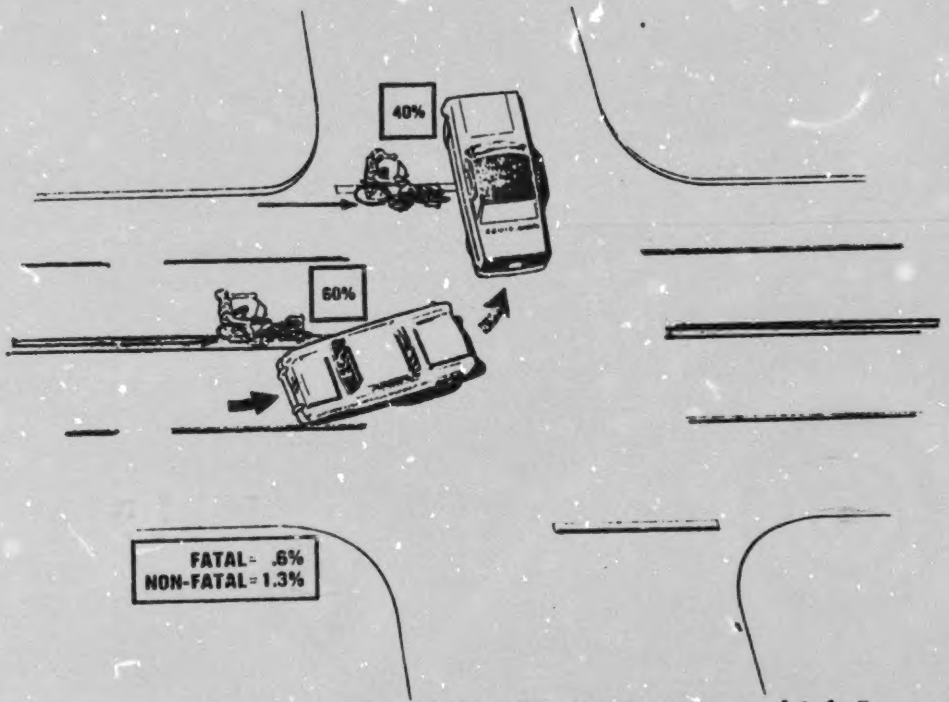


Illustration of Problem Type 22, *Motorist Unexpected Left Turn: Parallel Paths, Same Direction.*

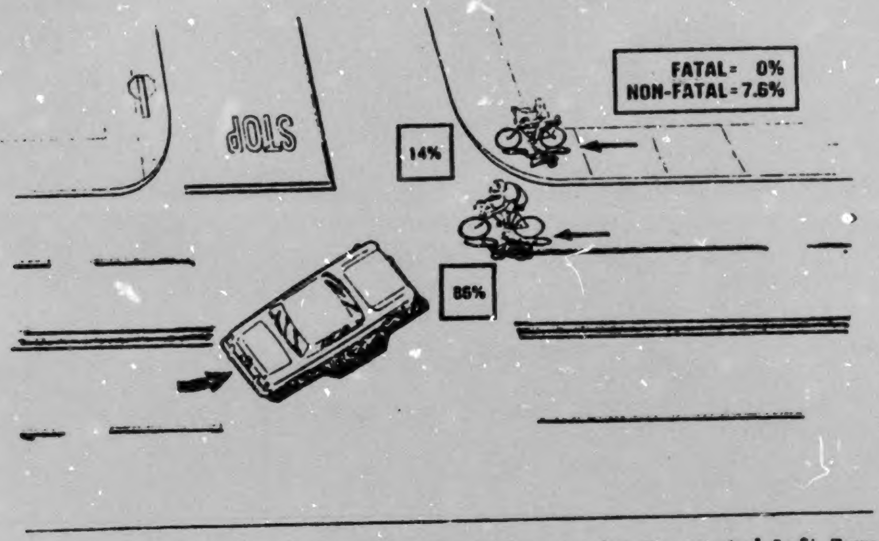

STOP
14%
86%
FATAL= 0%
NON-FATAL=7.6%

Illustration of Problem Type 23, *Motorist Unexpected Left Turn: Parallel Paths, Facing Approach.*

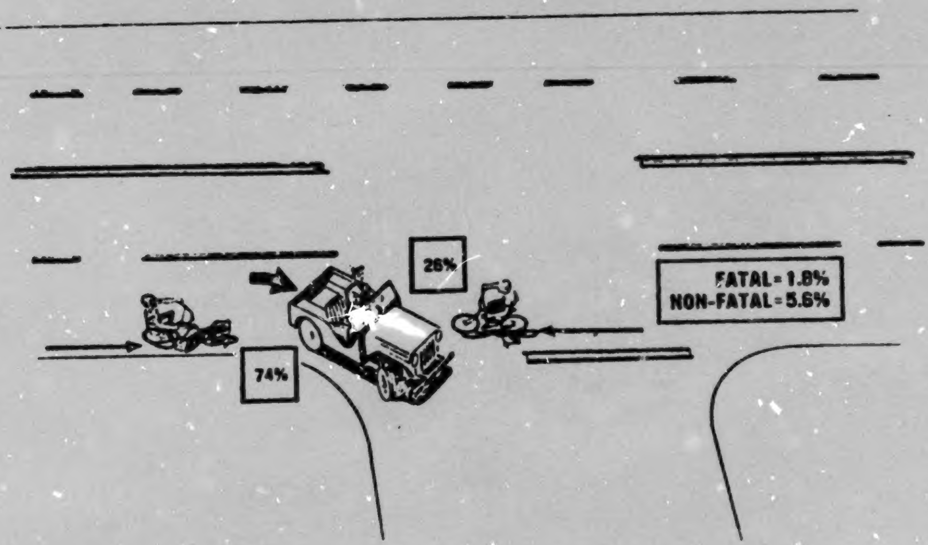

26%
74%
FATAL=1.8%
NON-FATAL=5.6%

Illustration of Problem Type 24, *Motorist Unexpected Right Turn: Parallel Paths.*

PROBLEM CLASS G--OTHER

		FATAL (N=166)	NON-FATAL (N=753)
TYPE 25	VEHICLES COLLIDE AT UNCONTROLLED INTERSECTION: ORTHOGONAL PATHS	.6%	2.8%
TYPE 26	VEHICLES COLLIDE HEAD-ON, WRONG-WAY BICYCLIST	2.4%	3.6%
TYPE 27	BICYCLIST OVERTAKING	.6%	.9%
TYPE 28	HEAD-ON, WRONG-WAY MOTORIST	1.8%	.8%
TYPE 29	PARKING LOT, OTHER OPEN AREA: ORTHOGONAL PATHS	.6%	.8%
TYPE 30	HEAD-ON, COUNTERACTIVE EVASIVE ACTION	---	.1%
TYPE 31	BICYCLIST CUTS CORNER WHEN TURNING LEFT: ORTHOGONAL PATHS	.6%	---
TYPE 32	BICYCLIST SWINGS WIDE WHEN TURNING RIGHT: ORTHOGONAL PATHS	---	.3%
TYPE 33	MOTORIST CUTS CORNER WHEN TURNING LEFT: ORTHOGONAL PATHS	---	.4%
TYPE 34	MOTORIST SWINGS WIDE WHEN TURNING RIGHT: ORTHOGONAL PATHS	---	.1%
TYPE 35	MOTORIST DRIVEOUT FROM ON-STREET PARKING	---	.3%
TYPE 36	WEIRD	---	1.1%
---	INSUFFICIENT INFORMATION TO CLASSIFY	7.2%	---
TOTAL CLASS (N: FATAL = 23; NON-FATAL = 84)		13.8%	11.2%

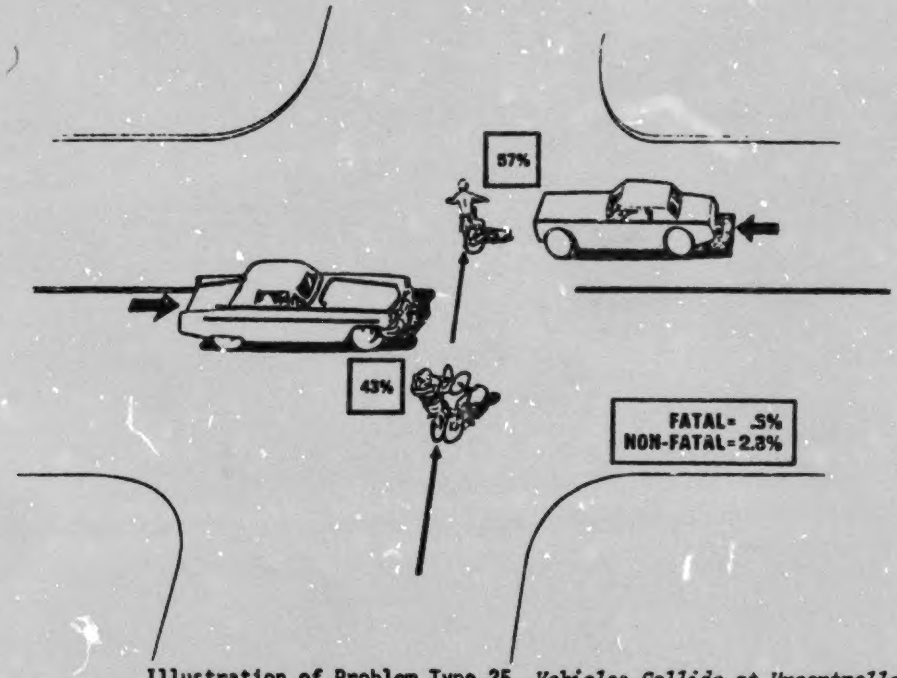


Illustration of Problem Type 25, *Vehicles Collide at Uncontrolled Intersection: Orthogonal Paths.*

WHAT TO ENFORCE

ATTACHMENT B

TABULAR SUMMARY OF THE CROSS AND FISHER PROMINENT ACCIDENT TYPES

QUICK-REFERENCE TABLE SHOWING RELATIVE FREQUENCY OF OCCURRENCE AND BICYCLIST AGE DISTRIBUTION FOR EACH PROBLEM TYPE

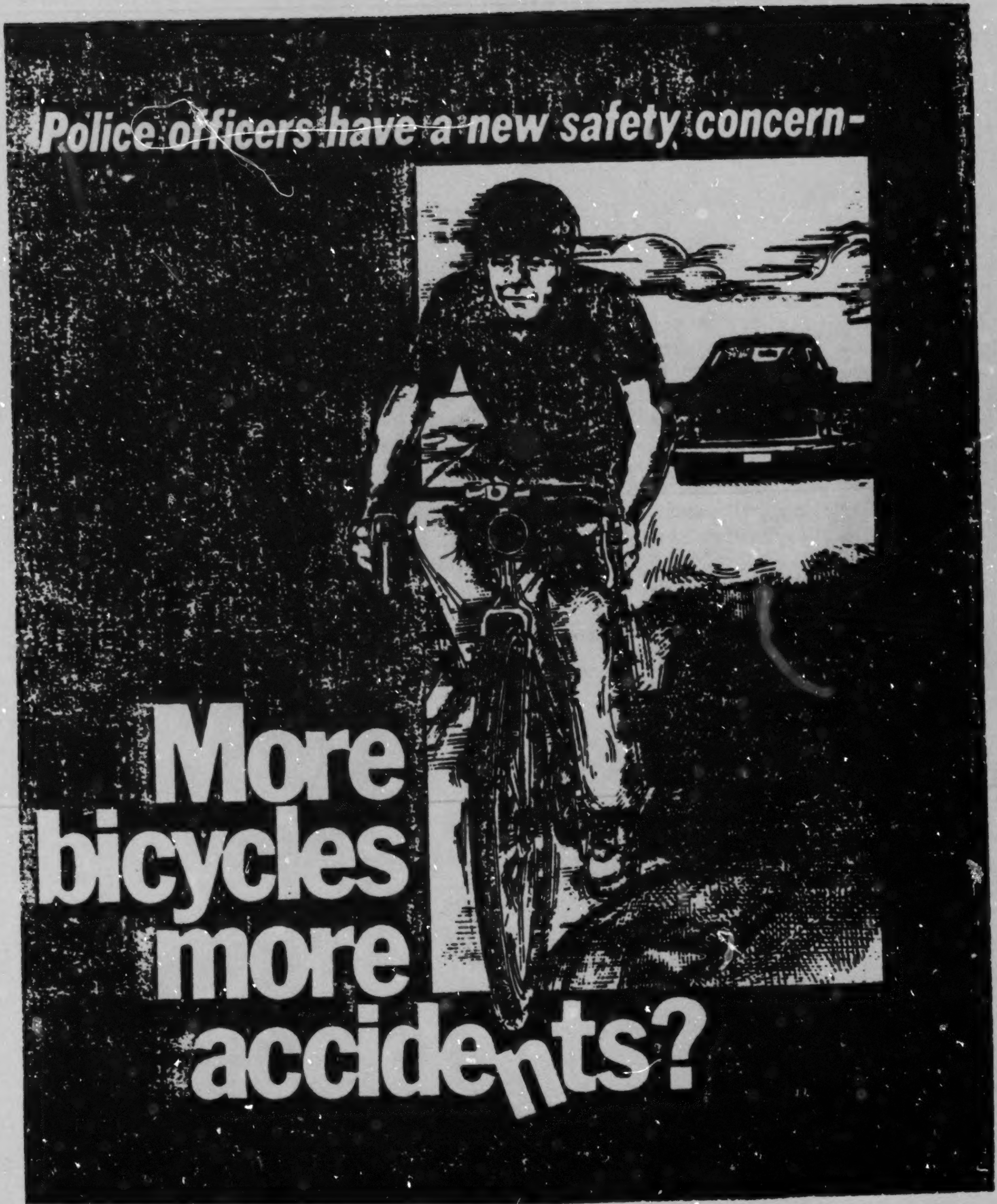
CLASS/TYPE DESIGNATOR		PROBLEM-TYPE DESCRIPTION	RELATIVE FREQUENCY OF OCCURRENCE		BICYCLIST AGE (CENTILES)				
CLASS	TYPE		FATAL	NON-FATAL	5TH	25TH	50TH	75TH	95TH
A	1	BICYCLE RIDEOUT: RESIDENTIAL DRIVEWAY/ALLEY, PRE-CRASH PATH PERPENDICULAR TO ROADWAY	6.7%	5.7%	5.2	7.4	9.8	12.3	15.9
A	2	BICYCLE RIDEOUT: COMMERCIAL DRIVEWAY/ALLEY, PRE-CRASH PATH PERPENDICULAR TO ROADWAY	2.4%	3.2%	7.6	9.4	13.8	14.9	24.9
A	3	BICYCLE RIDEOUT: DRIVEWAY/ALLEY APRON, PRE-CRASH PATH PARALLEL TO ROADWAY	2.4%	2.5%	5.9	9.6	11.5	13.1	16.0
A	4	BICYCLE RIDEOUT: ENTRY OVER SHOULDER/CURB	3.6%	2.5%	6.9	9.5	11.5	14.5	15.0
B	5	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGN	7.8%	10.2%	6.8	9.1	11.8	14.3	19.4
B	6	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGNAL, SIGNAL PHASE CHANGE	.6%	3.1%	10.1	13.3	16.1	17.8	32.8
B	7	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGNAL, MULTIPLE THREAT	2.4%	2.0%	11.8	12.9	15.2	15.9	33.2
B	-	BICYCLE RIDEOUT: INTERSECTION CONTROLLED BY SIGNAL, OTHER	1.2%	1.7%	9.6	13.9	16.9	23.9	34.4
C	8	MOTORIST TURN-MERGE: COMMERCIAL DRIVEWAY/ALLEY	---	5.3%	7.9	13.3	15.4	17.5	49.9
C	9	MOTORIST TURN-MERGE/DRIVE THROUGH: INTERSECTION CONTROLLED BY SIGN	1.2%	10.2%	10.4	13.8	16.3	20.5	35.6
C	10	MOTORIST TURN-MERGE: INTERSECTION CONTROLLED BY SIGNAL	---	1.9%	10.6	12.1	13.3	24.4	72.4
C	11	MOTORIST BACKING FROM RESIDENTIAL DRIVEWAY	---	.8%	-	-	-	-	-
C	12	MOTORIST DRIVEOUT: CONTROLLED INTERSECTION	1.2%	.5%	-	-	-	-	-
D	13	MOTORIST OVERTAKING: BICYCLIST NOT OBSERVED	24.6%	4.0%	11.2	15.4	18.1	23.2	59.6
D	14	MOTORIST OVERTAKING: MOTOR VEHICLE OUT OF CONTROL	4.2%	.7%	-	-	-	-	-
D	15	MOTORIST OVERTAKING: COUNTERACTIVE EVASIVE ACTION	2.4%	1.7%	5.7	9.2	12.3	14.4	15.7
D	16	MOTORIST OVERTAKING: MOTORIST MISJUDGED SPACE REQUIRED TO PASS	1.8%	2.0%	8.7	13.5	15.0	25.2	41.3
D	17	MOTORIST OVERTAKING: BICYCLIST'S PATH OBSTRUCTED	.6%	2.0%	9.1	12.9	16.3	23.2	32.2
D	-	MOTORIST OVERTAKING: TYPE UNKNOWN	4.2%	.1%	-	-	-	-	-

TABLE 21 (CONTINUED)

CLASS/TYPE DESIGNATOR		PROBLEM TYPE DESCRIPTION	RELATIVE FREQUENCY OF OCCURRENCE		BICYCLIST AGE (CENTILES)				
CLASS	TYPE		FATAL	NON-FATAL	5TH	25TH	50TH	75TH	95TH
E	18	BICYCLIST UNEXPECTED LEFT TURN: PARALLEL PATHS, SAME DIRECTION	8.4%	8.4%	7.2	10.6	12.7	14.5	20.9
E	19	BICYCLIST UNEXPECTED LEFT TURN: PARALLEL PATHS, FACING APPROACH	3.0%	3.2%	6.2	11.7	13.8	18.5	35.8
E	20	BICYCLIST UNEXPECTED SWERVE LEFT: PARALLEL PATHS, SAME DIRECTION (UNOBSTRUCTED PATH)	3.6%	1.5%	8.5	10.2	11.5	15.1	16.4
E	21	WRONG-WAY BICYCLIST TURNS RIGHT: PARALLEL PATHS	1.2%	1.1%	-	-	-	-	-
F	22	MOTORIST UNEXPECTED LEFT TURN: PARALLEL PATHS, SAME DIRECTION	.6%	1.3%	11.5	13.5	15.9	23.5	37.5
F	23	MOTORIST UNEXPECTED LEFT TURN: PARALLEL PATHS, FACING APPROACH	---	7.6%	10.8	15.7	20.1	26.6	46.2
F	24	MOTORIST UNEXPECTED RIGHT TURN: PARALLEL PATHS	1.8%	5.6%	12.1	14.6	16.8	22.9	33.9
G	25	VEHICLES COLLIDE AT UNCONTROLLED INTERSECTION: ORTHOGONAL PATHS	.6%	2.8%	6.0	9.3	12.4	13.9	19.9
G	26	VEHICLES COLLIDE HEAD-ON, WRONG-WAY BICYCLIST	2.4%	3.6%	6.5	10.9	12.9	15.3	20.5
G	27	BICYCLIST OVERTAKING	.6%	.9%	-	-	-	-	-
G	28	HEAD-ON, WRONG-WAY MOTORIST	1.8%	.8%	-	-	-	-	-
G	29	PARKING LOT, OTHER OPEN AREA: ORTHOGONAL PATHS	.6%	.8%	-	-	-	-	-
G	30	HEAD-ON, COUNTERACTIVE EVASIVE ACTION	---	.1%	-	-	-	-	-
G	31	BICYCLIST CUTS CORNER WHEN TURNING LEFT: ORTHOGONAL PATHS	.6%	---	-	-	-	-	-
G	32	BICYCLIST SWINGS WIDE WHEN TURNING RIGHT: ORTHOGONAL PATHS	---	.3%	-	-	-	-	-
G	33	MOTORIST CUTS CORNER WHEN TURNING LEFT: ORTHOGONAL PATHS	---	.4%	-	-	-	-	-
G	34	MOTORIST SWINGS WIDE WHEN TURNING RIGHT: ORTHOGONAL PATHS	---	.1%	-	-	-	-	-
G	35	MOTORIST DRIVEOUT FROM ON-STREET PARKING	---	.3%	-	-	-	-	-
G	36	WEIRD	---	1.1%	-	-	-	-	-
G	37	INSUFFICIENT INFORMATION TO CLASSIFY	7.2%	---	-	[illegible]	-	-	-

ATTACHMENT C

REPRODUCTION OF THE NHTSA PAMPHLET "MORE BICYCLES MORE ACCIDENTS?"


Police officers have a new safety concern-
More
bicycles
more
accidents?

BEST COPY AVAILABLE

INTRODUCTION

This document was prepared specifically for law enforcement officials who are in an ideal position to help prevent bicycle accidents. The first part of the document describes the nation's annual toll in bicycle/motor vehicle accidents. The second part of the document discusses ten of the most frequently occurring types of bicycle/motor vehicle accidents based on a study of bicycle/motor vehicle accidents performed by Cross and Fisher (1977), and funded by the U. S. Department of Transportation, National Highway Traffic Safety Administration, Office of Driver and Pedestrian Research (Contract DOT-HS-4-00982). The third and final part of the document identifies the bicyclist errors and violations that most frequently lead directly to bicycle/motor vehicle accidents, and discusses what law enforcement officials can do to decrease the incidence of the critical violations.

ANNUAL TOLL IN BICYCLE/ MOTOR VEHICLE ACCIDENTS

...ABOUT 1,000 BICYCLISTS ARE KILLED AND 70,000 INJURED EACH YEAR...

Each year, the National Highway Traffic Safety Administration compiles data on accidents involving bicycles and motor vehicles. These data indicate that bicycle/motor vehicle accidents have resulted in almost 1,000 fatalities and at least 70,000 disabling injuries in recent years. Although these figures are the best available estimates of the actual number of bicycle/motor vehicle accidents, they are highly conservative because they are based primarily on police-reported accidents. The findings of several recent studies indicate that about two-thirds of the non-fatal bicycle/motor vehicle accidents that occur each year are *not* reported to the police and that about one-half of the unreported accidents are severe enough to require medical treatment. Hence, while the best information now available indicates that about 1,000 bicyclists are killed and about 70,000 bicyclists are seriously injured each year in bicycle/motor vehicle accidents, the problem is likely even more serious.

Bicycle/motor vehicle accidents leave a devastating toll of death, injury, economic losses, and personal suffering. The bicyclist or the bicyclist's passenger is nearly always the person injured when a bicycle and a motor vehicle collide. On the average, a bicyclist who is not killed in the accident can expect to spend 1.4 days in a hospital and a similar amount of time in bed at home. In addition, the injured bicyclist will lose over four days of work or school and will suffer almost 24 days of pain or discomfort after returning to work or school.

People involved in bicycle/motor vehicle crashes may also suffer psychologically. They are often grief-stricken at the sight of another person who has been injured. Lawsuits often result from these accidents, producing an even greater economic and emotional strain on the parties. In addition to the emotional stress associated with an injured loved one, relatives, friends, and the accident victim may also suffer substantial losses of money and time in caring for an injured operator. It has been estimated that only those bicycle/motor vehicle accidents reported to the police involve a total annual cost to society of 275 million dollars.

ACCIDENT TYPES

It is clear that bicycle/motor vehicle crashes are a major cause of death and of serious injury, suffering, and financial loss across the country. It is also clear that you, as a police officer, are in a position to lower the rate of bicycle-related fatalities and injuries by knowing the factors that cause these accidents and taking action to prevent them.

The following pages describe ten types of bicycle/motor vehicle accidents that occur frequently in most United States communities. Together, the ten accident types account for about 70% of all fatal and about 80% of all non-fatal bicycle/motor vehicle accidents that occur in the United States. This section also contains a special note on the hazards of wrong-way riding.

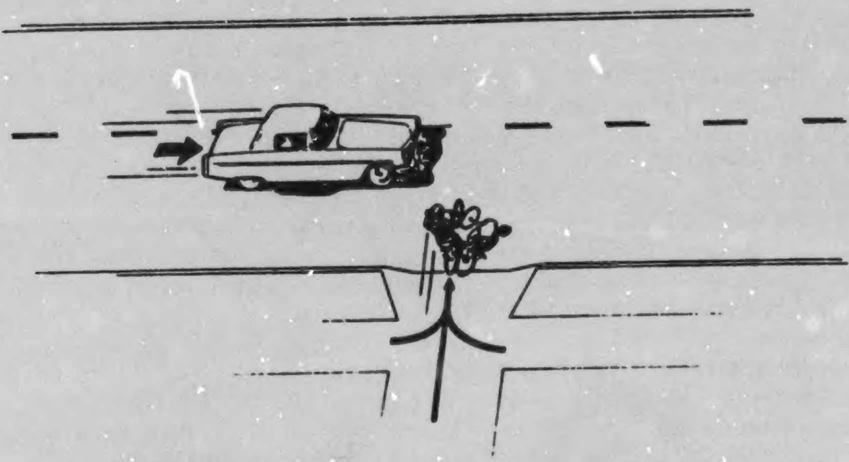
Law enforcement officials who are concerned with reducing the incidence of bicycle/motor vehicle accidents should become familiar with these ten accident types so they can use their training and influence to prevent the critical errors which cause them.

MIDBLOCK RIDEOUT

ACCIDENT DESCRIPTION. **Midblock rideout** accidents occur when a bicyclist enters the street from a driveway, from an alley, or over a curb or shoulder and collides with an approaching motor vehicle. In the typical case, the bicyclist rides straight out of a driveway or alley. However, a significant number of **midblock rideout** accidents occur when the bicyclist enters the street from a parallel sidewalk by way of a driveway/alley apron or over a curb/shoulder. Nearly all **midblock rideout** accidents occur during daylight hours at a location near the bicyclist's home.

A distinguishing characteristic of **midblock rideout** accidents is that the bicyclist enters the street without slowing and without searching for approaching motor vehicle traffic. A second distinguishing characteristic is that the motorist has insufficient time to avoid the accident once the bicyclist is seen and the motorist recognizes that the bicyclist does not intend to stop before entering the street. In some cases, the operators' views of the other vehicle are partially or totally obstructed by parked motor vehicles, vegetation, or structures located near the point the bicyclist enters the street, although in a majority of cases, neither operator's view is obstructed.

Midblock rideout accidents typically involve a juvenile or teenage bicyclist. Over 75% of the bicyclists who become involved in **midblock rideout** accidents are under 14 years of age. However, very few bicyclists under eight years of age are involved. Even though **midblock rideout** accidents involve only young bicyclists, they still account for almost 15% of all bicycle/motor vehicle accidents.



CRITICAL ERRORS. **The error that leads most directly to midblock rideout accidents is the bicyclist's rapid and unexpected entry into the street without slowing and without searching for approaching motor vehicle traffic. Secondary errors of importance include the failure to perceive the danger inherent in visual obstructions, and the failure to detect motor vehicles due to inadequate searching.**

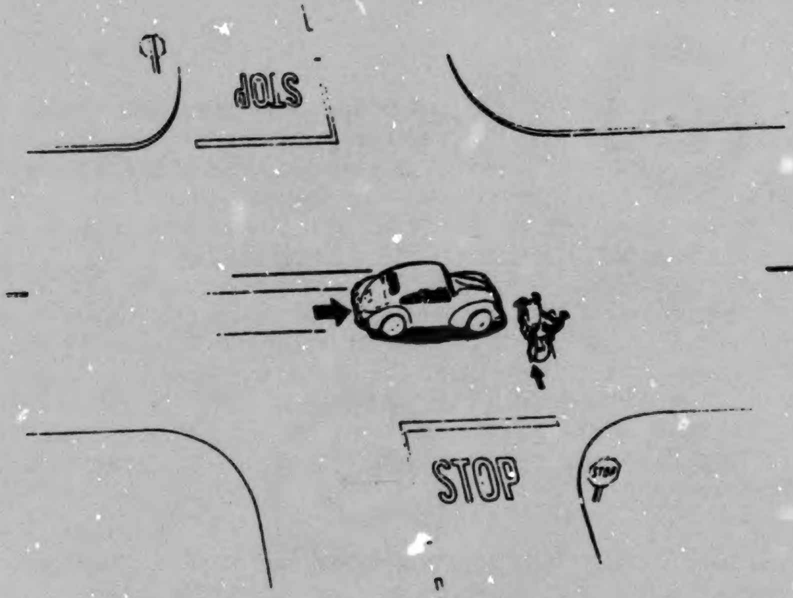
STOP SIGN RIDEOUT

ACCIDENT DESCRIPTION. **Stop sign rideout** accidents occur when a bicyclist enters a "signed" intersection and collides with a motor vehicle approaching on an uncontrolled leg of the intersection. The bicyclist approaches the intersection on a street that is controlled by a "stop" sign (96%) or a "yield" sign (4%). The distinguishing characteristic of **stop sign rideout** accidents is that the bicyclist fails to slow down significantly and fails to search for approaching motor vehicle traffic prior to entering the intersection. In about one case in five, the bicyclist enters the intersection riding on the wrong side of the street--facing oncoming traffic. In all cases, the motorist has insufficient time to avoid the accident once the bicyclist is seen and the motorist recognizes that the bicyclist does not intend to stop before entering the intersection.

The bicyclist's failure to stop or yield before entering the intersection is not the result of a failure to observe the traffic sign. The bicyclist also knows that the law requires bicyclists to stop/yield at signed intersections. The failure to stop appears to be the result of one or more of the following:

- The bicyclist assumes there are no motor vehicles in the intersection.
- The bicyclist is in a hurry.
- The bicyclist is distracted.
- The bicyclist assumes a lead bicyclist will search for motor vehicles approaching the intersection.

More than nine out of ten **stop sign rideout** accidents occur during daylight hours. In total, they represent about 10% of all bicycle/motor vehicle accidents.



Although bicyclists of all ages frequently fail to stop or slow at signed intersections, **stop sign rideout** accidents nearly always involve a juvenile or teenage bicyclist. About 75% of the bicyclists involved in **stop sign rideout** accidents are 14 years of age or younger.

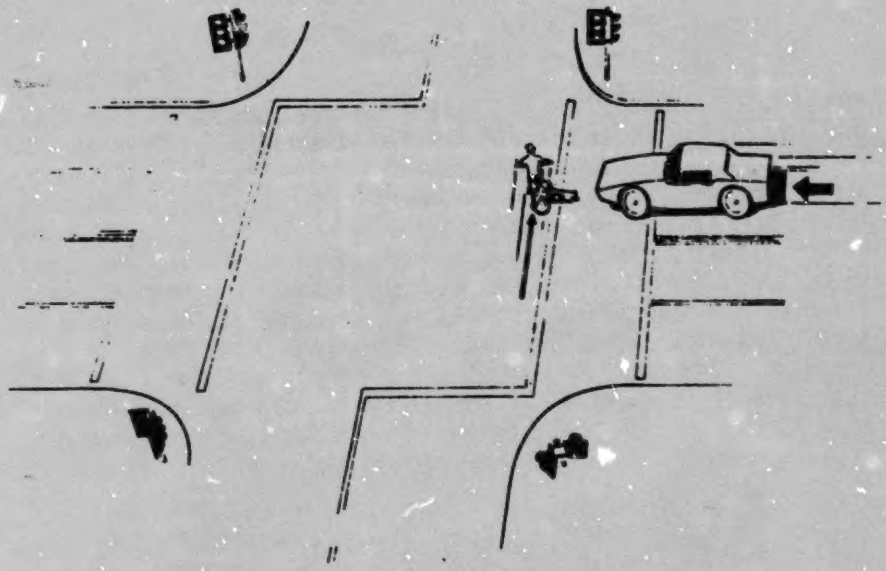
CRITICAL ERROR. The error that leads most directly to **stop sign rideout** accidents is the bicyclist's failure to stop/slow and to search for approaching motor vehicle traffic before entering the signed intersection.

TRAPPED-BY-THE-SIGNAL

ACCIDENT DESCRIPTION. All **trapped-by-the-signal** accidents occur within a signalized intersection. The signal controlling the bicyclist's leg of the intersection is green or yellow at the time the bicyclist enters the intersection, but changes to red before the bicyclist can clear the intersection. The bicyclist collides with a motor vehicle approaching on an intersecting roadway. In all cases, the signal controlling the motorist's leg of the intersection is green at the time he enters the intersection. Some bicyclists observe the signal change from green to yellow; others fail to observe the signal phase change. In either case, the bicyclist proceeds into the intersection with the assumption that he can clear the intersection before the onset of the red signal phase. In most of the cases, the intersecting street the bicyclist intends to cross has four or more traffic lanes.

The motorist usually fails to observe the bicyclist soon enough to avoid the accident even though he performs a routine search before entering the intersection. In over half of the cases, the bicyclist fails to search in the motorist's direction until an accident is imminent. In the remaining cases, one operator observes the other vehicle soon enough to avoid the accident but incorrectly assumes that the other operator will stop or yield.

Trapped-by-the-signal accidents account for about 3% of all non-fatal bicycle/motor vehicle accidents but very few fatalities. The relatively low incidence of fatal accidents is due to the low motor vehicle speeds at impact. The motorist was either accelerating from a stopped position or, more commonly, had slowed to a low speed for the red signal and accelerated when the signal turned green a moment before the collision.



Few very young bicyclists and few adult bicyclists become involved in trapped-by-the-signal accidents. Only five percent of the bicyclists are 11 years of age or younger and only 15% are older than 17 years.

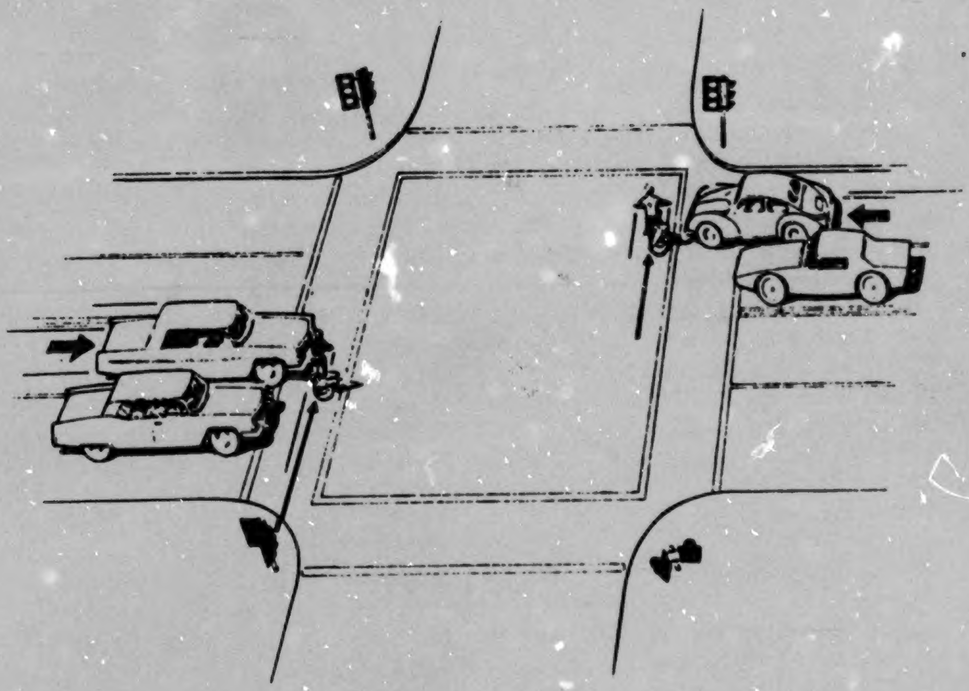
CRITICAL ERRORS. The errors that lead most directly to trapped-by-the-signal accidents are the bicyclist's entry into a signalized intersection when there is insufficient time to clear the intersection before the onset of the red signal phase, and the motorist's entry into the intersection before it is clear of cross traffic.

MULTIPLE THREAT

ACCIDENT DESCRIPTION. **Multiple threat** accidents occur in a manner similar to **trapped-by-the-signal** accidents. The bicyclist enters a signalized intersection shortly before or shortly after the onset of the yellow signal phase and is unable to clear the intersection before the onset of the red signal phase. The intersecting street the bicyclist intends to cross has two or more traffic lanes, and at least one of the lanes is occupied by a standing motor vehicle. The bicyclist observes the standing motor vehicle and correctly assumes that he has been observed by the motor vehicle's operator. However, the bicyclist incorrectly assumes that he has been or will be observed by the operators of other motor vehicles stopped at, or approaching the intersection and overtaking the standing vehicle whose operator has seen the bicyclist.

Shortly after the bicyclist passes in front of the standing motor vehicle, he collides with a moving motor vehicle that enters the intersection in the next traffic lane beyond the one occupied by the standing motor vehicle. The moving motor vehicle does not enter the intersection before the light turns green. The operator of the moving motor vehicle fails to observe the bicyclist soon enough to avoid the accident because the standing motor vehicle partially or totally obstructs his view of the bicyclist, because the operator fails to search in the direction of the bicyclist, or because of darkness combined with inadequate bicycle lighting.

The age distribution of bicyclists involved in **multiple threat** accidents is nearly the same as the age distribution of bicyclists involved in **trapped-by-the-signal** accidents. Few very young or adult bicyclists are involved. The typical victim is a teenager. About 2% of all bicycle/motor vehicle crashes are of this type.

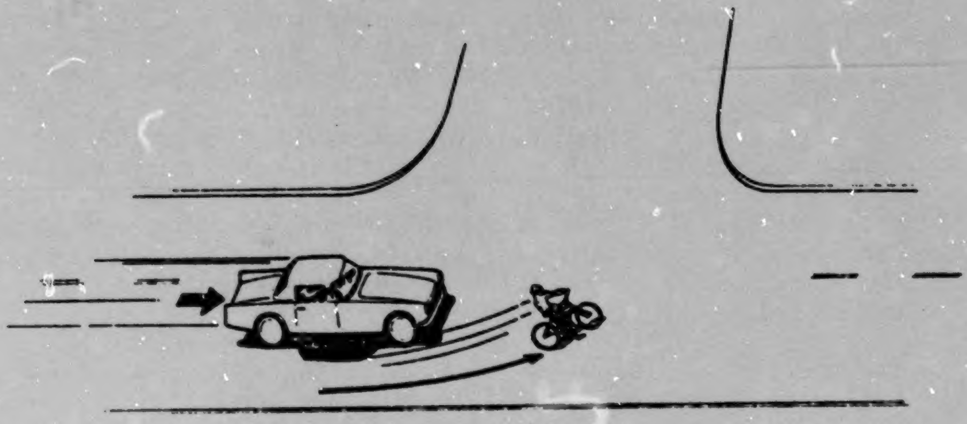


CRITICAL ERRORS. The errors that lead most directly to multiple threat accidents are: the bicyclist's entry into a signalized intersection when there is insufficient time to clear the intersection before the onset of the red signal phase, and the motorist's entry into the intersection before the motorist can see that the intersecting legs of the intersection are clear of traffic.

BICYCLIST UNEXPECTED LEFT TURN

ACCIDENT DESCRIPTION. Prior to a **bicyclist unexpected left turn** accident, the bicyclist is riding along the right-hand edge of the roadway, traveling in the same direction as motor vehicle traffic in the adjacent lane. Without looking to the rear and without signaling, the bicyclist makes a left-hand turn and collides with an overtaking motor vehicle. The overtaking motorist observes the bicyclist well in advance, but has no time for evasive action when the bicyclist suddenly turns. About half of the bicyclists turn left at the junction of a roadway or driveway, while the remaining bicyclists turn at a point that is not close to any type of junction. **Bicyclist unexpected left turn** accidents occur on both urban and rural roadways. **Bicyclist unexpected left turn** accidents do not include cases in which the bicyclist loses control of his bicycle and inadvertently swerves left. Factors contributing to the bicyclist's failure to search behind and signal before turning include the following:

- The bicyclist is distracted by riding companions.
- The bicyclist is following another bicyclist and assumes the lead bicyclist will search for overtaking traffic and will turn only when it is safe to do so.
- The bicyclist is reluctant to search behind because it is difficult to do so without loss of balance and lateral control.
- The bicyclist knows that the roadway on which he is traveling carries light and sporadic traffic.
- The bicyclist has become accustomed to listening for the sound of an overtaking motor vehicle and mistakenly assumes that such a vehicle will always be loud enough to hear.



Most of the bicyclists involved in this type of accident are between the ages of 8 and 14. Over 8% of all bicycle/motor vehicle accidents are accounted for by this type, which often results in serious injury or death because of the relatively high vehicle speeds at impact.

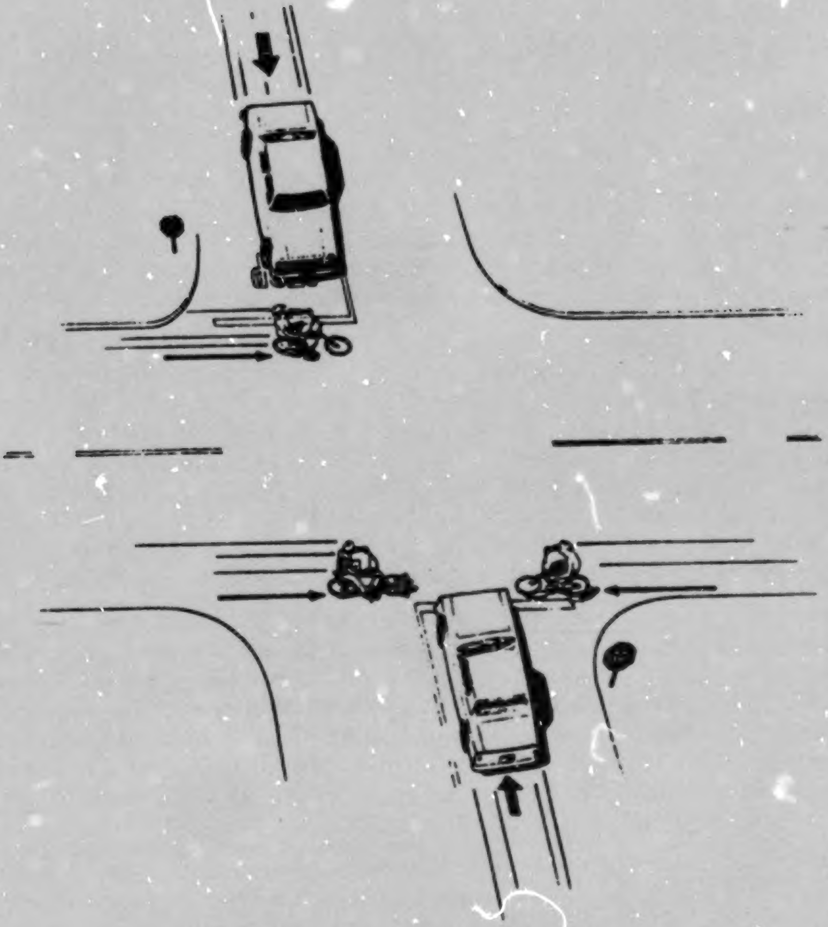
CRITICAL ERRORS. The errors that lead most directly to **bicyclist unexpected left turn** accidents are the bicyclists' failures to search behind and to signal before initiating a left turn.

MOTORIST STOP-AND-GO

ACCIDENT DESCRIPTION. In **motorist stop-and-go** accidents, the motorist approaches an intersection, brings his vehicle to a complete stop, and searches the intersecting street for approaching traffic. The motorist performs the search in a manner that would usually be normal for this situation. When the motorist considers it safe, he proceeds into the intersecting street without having observed the bicyclist approaching, usually from the right, and strikes the bicyclist before having reached the center of the intersecting roadway. About 60% of all **motorist stop-and-go** accidents occur at a signed intersection, 30% occur as the motorist enters a roadway from a commercial driveway/alley, and 10% occur at a signalized intersection as the motorist is making a legal right-turn-on-red.

The most common reason for the motorist's failure to observe the bicyclist is that the bicyclist is riding in an unexpected location--in the street facing traffic or on the sidewalk. Darkness and inadequate bicycle lighting are factors in about one-third of the accidents in which the bicyclist is riding legally in the street. In the majority of these accidents, the bicyclist observes the motor vehicle soon enough to avoid the accident but proceeds with the assumption that he has been (or will be) observed by the motorist and that the motor vehicle will remain stationary until he has passed.

Few very young bicyclists become involved in **motorist stop-and-go** accidents. Otherwise, bicyclists of all ages are about equally represented among the bicyclists who become involved in this type accident. Over half of the bicyclists are over 14 years of age. Few fatalities result from this type of accident because of the low motor vehicle speeds at impact. However, over 17% of non-fatal injury accidents fall into this type.



CRITICAL ERRORS. The errors that lead most directly to motorist stop-and-go accidents are: the bicyclist riding the wrong way facing traffic, the bicyclist riding on the sidewalk, and the motorist's entry into the intersecting street before it is clear of traffic.

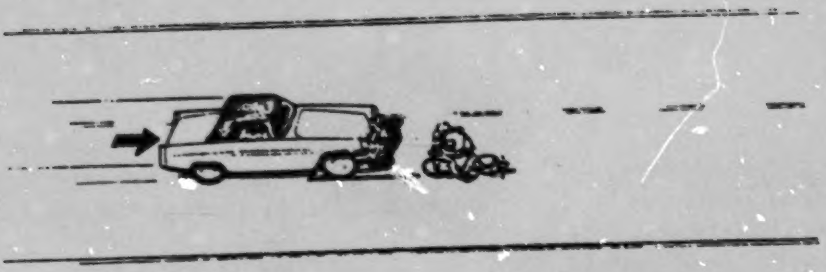
MOTORIST-OVERTAKING

ACCIDENT DESCRIPTION. The distinguishing characteristic of **motorist-overtaking** accidents is that a bicyclist, riding legally along the right-hand edge of the roadway, is struck from behind by an overtaking motor vehicle. The following descriptions characterize the three distinct forms of **motorist-overtaking** accidents.

Bicyclist not Observed. The collision most often occurs at night on a narrow, rural-type roadway. Prior to the collision, the bicyclist is riding along the right-hand edge of the traffic lane. At night, the bicyclist typically rides farther from the edge of the roadway than during the daytime because it is more difficult to see well enough to detect road-surface defects and debris along the extreme edge of the roadway. As the motor vehicle overtakes the bicyclist, its position in the traffic lane is slightly to the right of center and it is traveling at or near the posted speed limit--usually 45-50 MPH.

Although the motorist searches the roadway ahead, he fails to observe the bicyclist until it is too late to avoid the accident. The motorist's failure to observe the bicyclist is caused by darkness, inadequate bicycle lighting, relatively high speeds, and the expectation by motorists that the roadway will be clear of bicycle traffic at that hour. About one-third of the time, the influence of the above factors is compounded by the effects of alcohol consumed by the motorist a short time before the accident.

Motor Vehicle Out of Control. The bicyclist is riding legally along the right-hand edge of an urban street with two or more traffic lanes. As the motor vehicle overtakes the bicyclist, the motor vehicle operator loses control of his vehicle. In some instances, the motor vehicle skids or spins out of control. More commonly, however, the motor vehicle momentarily veers to the right far enough to strike the bicyclist. About 40% of the motorists lose control of their vehicle because of alcohol intoxication. The remainder lose control due to vehicle failure, snow and ice on the roadway, or a prior collision with another motor vehicle. Although many of these accidents occur during darkness, degraded visibility is not a contributing factor.



Motorist Misjudged Space. As a motorist overtakes a bicyclist riding on the right-hand edge of the roadway, he observes the bicyclist and steers his motor vehicle to the left until he thinks there is sufficient space to pass the bicyclist. In fact, the motorist underestimates the space required to pass the bicyclist and strikes the bicyclist with the extreme right-front portion of the motor vehicle.

Few very young bicyclists are involved in **motorist-overtaking** accidents. For example, 95% of the bicyclists are older than 12 years and 25% are older than 32 years. Apparently, few bicyclists younger than about 12 years of age are permitted to ride during darkness and in the types of areas where **motorist-overtaking** accidents occur.

This accident type in all of its forms represents over 30% of the fatal bicycle/motor vehicle accidents. It also accounts for almost 7% of the non-fatal crashes.

The likelihood of suffering fatal injuries is far higher for **motorist-overtaking** accidents than for any other kind of bicycle/motor vehicle accident. This high incidence of fatal injuries is mainly the result of the high speed of the motor vehicle on impact.

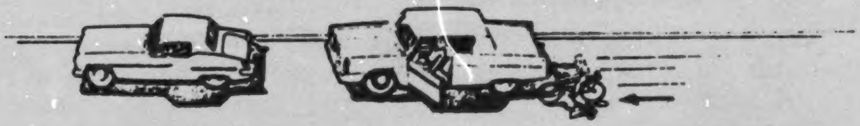
CRITICAL ERRORS. The errors that lead most directly to **motorist-overtaking** accidents are: the bicyclist's decision to ride on a narrow rural-type roadway during darkness, the motorist's failure to observe the bicyclist during darkness, the motorist's consumption of alcohol prior to driving, and the motorist's misjudgment of the space required to pass.

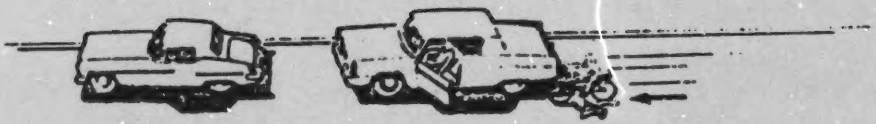
CAR-DOOR OPENING

ACCIDENT DESCRIPTION. **Car-door opening** accidents occur shortly after a motorist enters a parallel parking space. The motorist typically performs a routine search to the rear and opens the left-hand door of the motor vehicle when it appears safe to do so. The motorist fails to observe a bicyclist approaching from the left rear of the motor vehicle. The bicyclist, who has been riding too close to a row of parallel parked motor vehicles, fails to observe that the parked motor vehicle is occupied and fails to observe the opening car door until it is too late to avoid colliding with it. The accident most often occurs on narrow, urban streets where the number and turnover of parallel parked motor vehicles is high.

All bicyclist age groups are about equally represented in **car-door opening** accidents with the exception of very young bicyclists who are rarely involved. **Car-door opening** accidents represent about 3% of all bicycle/motor vehicle accidents in urban areas, but rarely occur in rural locations.

CRITICAL ERRORS. The errors that lead most directly to **car-door opening** accidents are: the motorist's failure to perform an effective search to the rear, and the bicyclist's failure to observe that the parked car is occupied and to anticipate the opening of the car door.





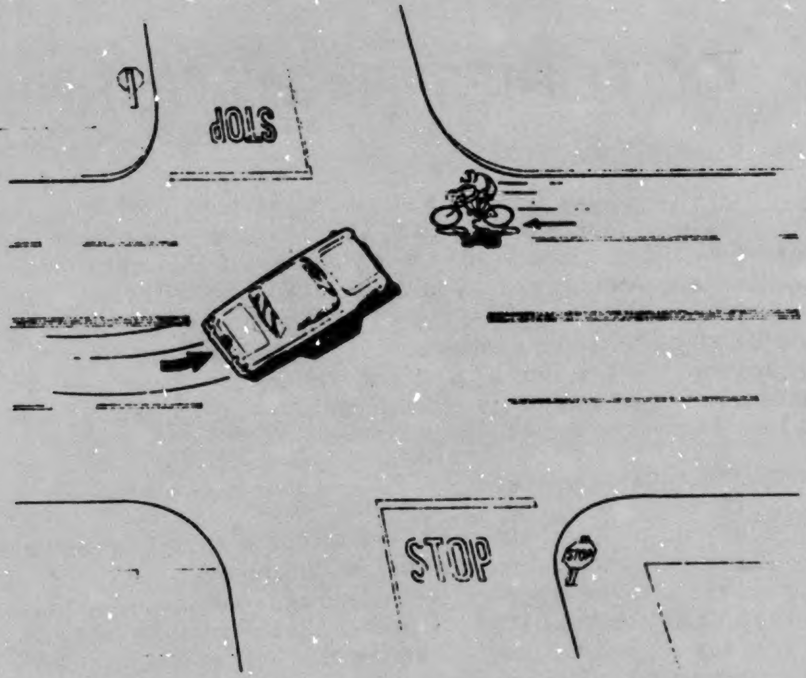
MOTORIST LEFT TURN

ACCIDENT DESCRIPTION. **Motorist left turn** accidents occur when a motorist makes a left-hand turn into the path of a bicyclist who is usually going in the opposite direction. **Motorist left turn** accidents most often occur at the junction of two streets, but 25% do occur as the motorist is turning left from a street into a driveway.

A distinguishing characteristic of **motorist left turn** accidents is that the motorist fails to observe the bicyclist until too late to avoid the accident. In about one case in four, the bicyclist is not observed because he is riding in an unexpected location—on the sidewalk, on the street facing traffic, or overtaking the motorist on the left. In the remaining cases, the motorist fails to observe the bicyclist even though he looks in the bicyclist's direction one or more times before beginning the left-hand turn. In only about 12% of the accidents is the motorist's failure to observe an approaching bicyclist due to darkness. Most of the time the motorist fails to observe an approaching bicyclist even though the lighting conditions are good, the bicyclist is highly visible, and the motorist searches in the bicyclist's direction before turning.

About one-third of the bicyclists fail to observe the motor vehicle until it is too late to avoid the accident. The remaining bicyclists observe the motor vehicle well in advance, recognize that the motor vehicle is going to turn, but incorrectly assume that the motorist will stop/yield until they have passed through the intersection.

Most bicyclists who become involved in a **motorist left turn** accident are teenagers or adults. Almost all of the victims are over 11 years of age and more than half of the bicyclists are over 20. Although this type of accident rarely results in a fatality, it accounts for over 8% of all bicycle/motor vehicle accidents.



CRITICAL ERRORS. The errors that lead most directly to **motorist left turn accidents** are: the motorist's failure to search in the bicyclist's direction, the motorist's failure to detect the bicyclist despite the fact that the bicyclist is clearly visible and the motorist has searched in the bicyclist's direction, the bicyclist's failure to search in the motorist's direction, and the bicyclist's incorrect assumption that the motorist will stop/yield until the bicyclist has passed through the junction.

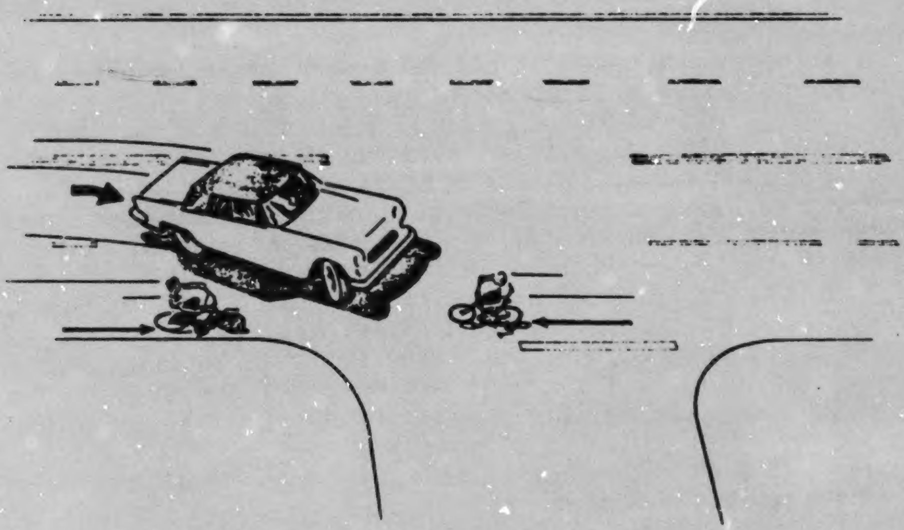
MOTORIST RIGHT TURN

ACCIDENT DESCRIPTION. **Motorist right turn** accidents occur when a motorist makes a right-hand turn into the path of a bicyclist most often approaching from the right rear of the motor vehicle. Bicyclists approaching from the front, riding on the wrong side of the street are also a significant part of this accident problem. Most **motorist right turn** accidents occur at either the junction of two roadways or the junction of a street and driveway, although a few accidents of this type involve situations in which the motorist turns right to enter an on-street parking space.

In virtually all of these accidents, the motorist fails to observe the bicyclist soon enough to avoid the accident. Darkness and obstructed vision to the rear of the motor vehicle are sometimes factors in this accident type. However, in the vast majority of the crashes, the bicyclist is clearly visible but not observed because of the motorist's failure to search in the bicyclist's direction.

A few of the bicyclists fail to search in the motorist's direction--usually because of momentary distractions. The majority, however, observe the motor vehicle well in advance, but fail to anticipate the motorist's intention to make a right-hand turn at the junction.

Bicyclists in their teens and older are the most frequent victims of this type of accident. Few bicyclists younger than 12 years of age are involved. **Motorist right turn** accidents account for about 5% of all bicycle/motor vehicle accidents.



CRITICAL ERRORS. The errors that lead most directly to **motorist right turn** accidents are: the motorist's failure to search in the bicyclist's direction, the motorist's failure to recognize and cope with visual obstructions (rear roof support of vehicle or load carried in vehicle), the bicyclist's failure to search in the motorist's direction, the bicyclist's position in the motorist's "blind spot," and the bicyclist's failure to anticipate the motorist's intention to turn right.

SPECIAL NOTE ABOUT WRONG-WAY RIDING

Wrong-way riding—riding against the flow of traffic—is one of the single most important factors contributing to bicycle/motor vehicle accidents. At least five percent of all fatal and 20% of all non-fatal collisions between bicycles and motor vehicles are the direct result of **wrong-way riding**. Few persons have a clear understanding of why **wrong-way riding** is now unlawful in every state. Many assume that the reason for this law is to avoid head-on collisions between bicycles and motor vehicles. This false assumption has led some persons to argue that the injuries resulting from a head-on accident would not be significantly greater than those resulting from an overtaking accident, and that riding facing traffic provides the bicyclist with a better opportunity to detect and evade motor vehicles that are traveling dangerously close to the edge of the roadway. This rationale has caused some parents and teachers to advise children to ride facing traffic, even with the full knowledge that it is unlawful to do so.

In fact, the main reason that **wrong-way riding** is unlawful is that **wrong-way riding** places bicyclists in unexpected locations--locations in the traffic environment that are seldom searched by even the most safety-conscious motorist. When a motorist is preparing to enter an intersecting street from another street or from a driveway, he ordinarily searches the far traffic lanes to his right and the near traffic lanes to his left. However, he seldom searches 90 degrees to his right because he doesn't expect a hazard to be approaching from that direction. As a consequence, motorists seldom observe a **wrong-way riding** bicyclist approaching the junction. Even bicyclists approaching on the sidewalk from the motorist's right are far less likely to be observed than bicyclists approaching on the sidewalk from the motorist's left.

A review of the ten accident types discussed previously shows that **wrong-way riding** contributes directly or indirectly to **stop sign rideout** accidents, **trapped-by-the-signal** accidents, **multiple threat** accidents, **motorist stop-and-go** accidents, **motorist left turn** accidents, and **motorist right turn** accidents. There is simply no good reason for a bicyclist to ride against the flow of traffic. It is extremely dangerous.

WHAT YOU CAN DO

As a law enforcement officer, you can do several things to help ensure that more bicycles do not mean more accidents. First, you must view your role as a dual one involving surveillance and education or enforcement. You cannot be a teacher of child bicyclists, but often a word of caution from you, immediately after you see a "critical" violation, will be all that is needed to promote safe, legal bicycling habits. You also cannot issue citations to all teenage or older bicyclists you see break a law. However, if you are sensitive to those errors which most often lead to bicycle/motor vehicle accidents, you will be in a position to stop unsafe behavior.

No matter which approach—enforcement or education—you choose to apply in a particular situation, you will get the best results if you are aware of the reasons why certain violations are "critical" and you act confidently on that knowledge to protect the bicycling public. It is a good idea to become quite familiar with the accident types described earlier in this booklet. They define situations you may encounter on patrol which research has shown to be associated with bicycle/motor vehicle accidents. From these accident types, it is possible to identify seven "critical" bicyclist violations which you should watch for and try to prevent. These are:

- Entering the roadway without first stopping, looking, or yielding to traffic.
- Disobeying a sign or signal at an intersection.
- Riding on the wrong side of the roadway, facing traffic.
- Riding on a sidewalk where prohibited.
- Riding during darkness without required reflectors and lights.

- Turning left without giving a signal or looking behind.
- Overtaking and passing cars (which might make turns) at intersections.

Enforcing bicycle laws is not popular. However, the increasing use of bicycles by people of all ages for sport, recreation, physical conditioning, and as a means of transportation, makes it more important than ever for you, the law enforcement officer, to get involved. Begin by understanding the hazards. Then intervene with words of caution or advice (particularly to younger children) and, if necessary, by writing a citation. Above all, remember that you see more of the "critical" violations and are in a better position to prevent them than almost anyone else in our society. Do not miss this opportunity to help both bicyclists and motorists avoid the tragedy of a bicycle/motor vehicle accident. Use your influence on bicyclists and motorists and on your colleagues and the community in general to promote safer bicycling for everyone. More bicycles ... more fun ... more energy savings....

WHAT TO ENFORCE

ATTACHMENT D

ENFORCEMENT GUIDELINES
FROM THE
MINNESOTA BIKE PATROL
TRAINING MANUAL

I. Introduction*

The bicycle patrol training manual is designed to help bike patrols through the training program. The manual will also serve as a reference guide during the summer months. The manual includes 8 sections. Three of the sections are devoted to the 3 major functions of bike patrols which are bicycle-traffic enforcement, bicycle safety education, and record keeping. Another section includes a study of bicycle accidents. In order to better perform each function, bike patrols must have an understanding of the causes of bicycle accidents. Since bike patrols will have a great deal of public contact they must have an adequate understanding of police-community relations. Other areas of training include basic first aid, basic radio procedures, locating and identifying stolen bicycles, and general employer/supervisor expectations of bike patrols.

II. Bicycle Patrol Functions

The three major functions of bike patrols are to enforce bicycle-traffic laws, teach bicycle safety, and to keep reocrds. The enforcement function is the most difficult. The enforcement function involves effectively handling a variety of bicycle enforcement situations; important decisions must be made on the spot, usually without the assistance of another bike patrol or a supervisor. Teaching bike safety requires adaptability and flexibility. Bike patrols will give presentations to small groups and large groups consisting of pre-school children, teens, and adults. The setting for the presentations will include violator seminars, summer school classes, summer park presentations and others.

In order to keep the bike program operating smoothly a certain amount of "paper work" must be completed. This includes sending letters to parents of juveniles who receive bike tickets, keeping statistics on types of violations most commonly occurring, maintaining a seminar attendance list, etc.

These three functions will consititute the majority of a bike patrols summer. Since all three functions are major responsibilities, each fundtion will be throughly discussed in the following sections.

A. ENFORCEMENT FUNCTION - The enforcement function includes patrolling the streets in order to promote safe bicycle driving. Oftentimes bicycle traffic laws are violated and bicycle patrols must either verbally warn the bicyclist or issue the bicyclist a ticket.

1. How Should You Patrol

a. Obey all traffic laws; including hand signals

b. Single file, not double
Problem:

---

*Source: Minnesota Bike Patrol Training Manual.

c. Patrolling vs. Stop and Hide

Patrolling - visibility, looks better, cover greater area, more effective.

Stop and Hide - very bad from public relations standpoint, less effective.

d. Stop and talk to people; introduce yourself, tell them what you are doing and why.

2. Where Should You Patrol

a. Use city maps, indicate locations and times of bike accidents.

b. Bicycle traffic will be heavy around swimming pools, parks, schools, shopping centers.

c. Bike patrol visibility - positive effect.

d. Be Aware of Special Events - park carnivals,etc.

3. Bicycle Ticket Writing

   a. Observational Skills - scan street ahead, occassionally behind. Check intersections not only for your safety, but also for violators.

      1. Be certain you see the violation. If someone tells you he/she saw a bicyclist run a stop sign you can not ticket.

      2. Diagrams of situations, refer to next page.

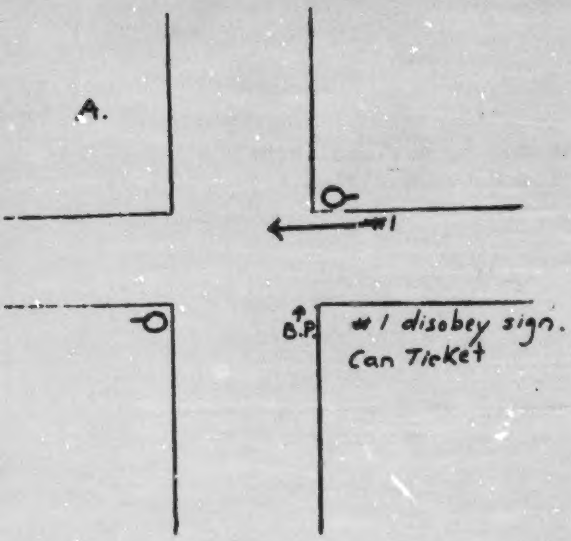
   b. How to Stop a Violator

      1. After you witness the violation, ride up behind the bicyclist and ask him/her to stop.

      2. Be polite. A bicycle violation is not a crime. Do not be mean and gruff.

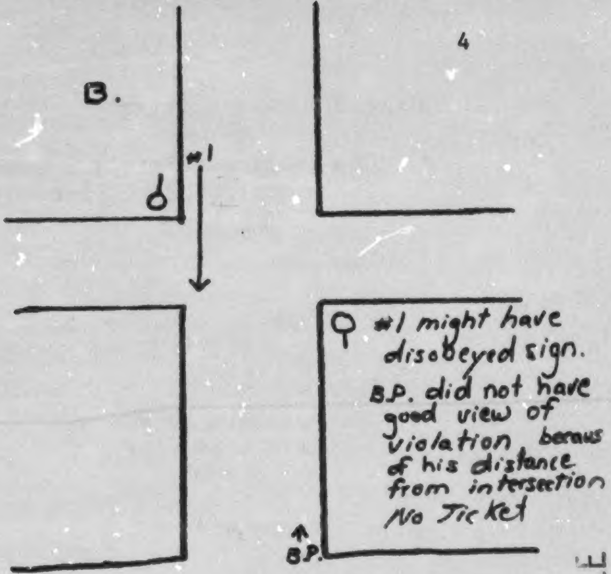
      3. Explain to the bicyclist who you are and why you stopped him/her.

A.



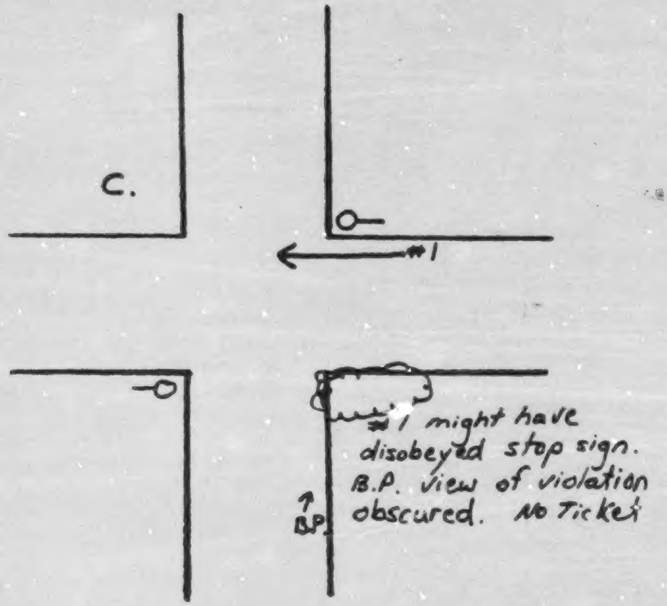
#1 disobey sign. Can Ticket

B.



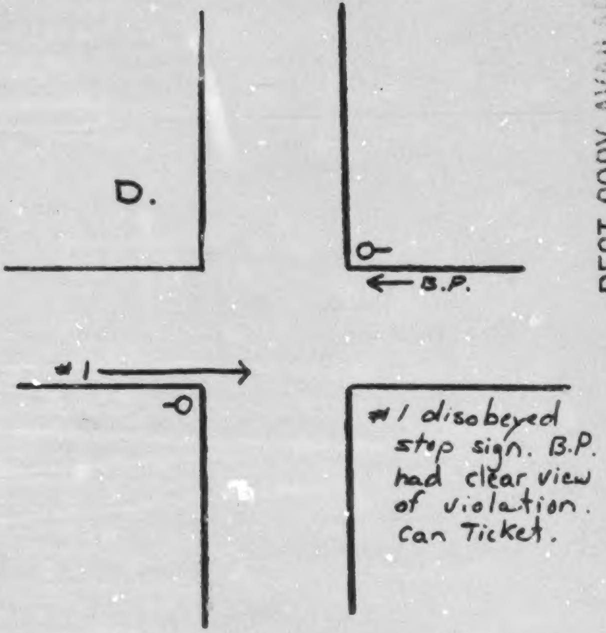
#1 might have disobeyed sign. B.P. did not have good view of violation becaus of his distance from intersection No Ticket

C.



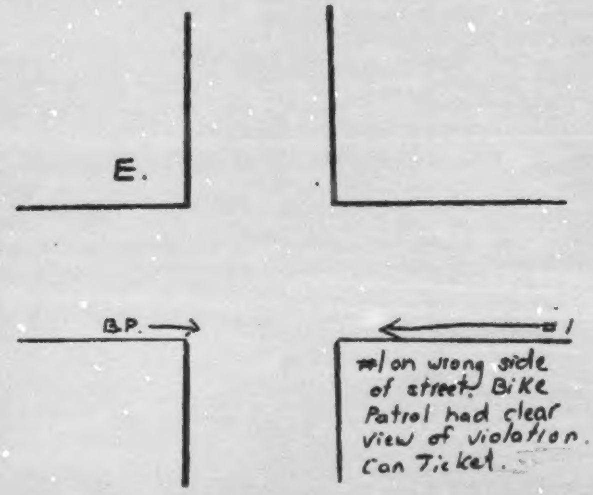
#1 might have disobeyed stop sign. B.P. view of violation obscured. No Ticket

D.



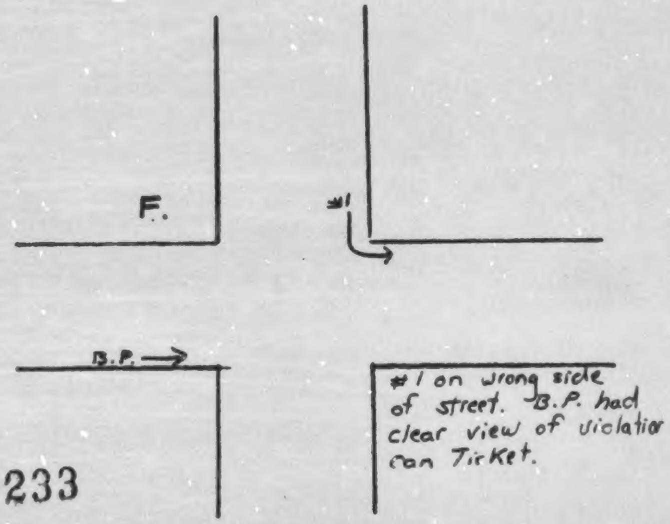
#1 disobeyed stop sign. B.P. had clear view of violation. Can Ticket.

E.



#1 on wrong side of street. Bike Patrol had clear view of violation. Can Ticket.

F.



#1 on wrong side of street. B.P. had clear view of violatior can Ticket.

BEST COPY AVAILABLE

c. Making your decision to verbally warn or to ticket.

1. You make the final decision.

2. Guidelines - each department will have their own, find out what they are.

3. Factors to weigh:

   a. type of violation - most flagerant violations include disobeying semaphores & stop signs, driving on wrong side of busy street.

   - did the violation nearly cause an accident.

   b. Age of Bicyclist - most departments do not ticket anyone under age 6. In most situations a verbal warning and some on-the-street instruction with a young child and the parent will accomplish more than a ticket.

   - most departments do not have their bike patrols ticket adults. Instead regular police officers issue straight citations for bicycle-traffic violations. However, bike patrols oftentimes verbally warn bicyclists, and also have bike patrol explain parogram.

c. Attitude of Bicyclist - have you verbally warned the bicyclist before?

- bicyclist with a very poor attitude

d. Other circumstances - road conditions, traffic volume, darkness, weather, etc.

4. What to Say to the Bicyclist

a. If you are verbally warning the bicyclist explain why you are verbally warning and not ticketing. Explain why the violation is dangerous, explain other bike-traffic laws, explain what will happen if they are stopped again for another violation, ask them if they have any question.

b. If you decide to ticket - explain why you are ticketing, why the violation is dangerous, explain the other traffic laws to them, explain exactly what will happen to the ticket. (In most departments there will be three copies of the ticket; one copy is given to the bicyclist, one is sent to the bicyclist's parents, and one copy is filed.) Tell them a letter will be sent to their parents with a copy of the ticket. (The letter will indicate a date, time and location of a bicycle safety seminar.) Explain to the bicyclist that he/she will be called in to discuss the violation and other bicycle safety matters, (attending a seminar). Tell the bicyclist he/she has the option of contesting the ticket, which will mean the ticket will be referred to juvenile traffic court. Ask the bicyclist if he/she has any questions.

5. Writing Out the Ticket

   a. Fill in all the spaces.

   b. Write clearly; have the bicyclist spell their last name.

   c. Press down hard so that all copies are clear.

   d. Write narative/diagram on back of ticket or in a notebook if you anticipate a problem - See your superviosor.

   e. Refer to examples of tickets.

6. SITUATIONS YOU MIGHT ENCOUNTER

   a. You see bicyclist violate a traffic law, you ask him to stop, he runs on you. What should you do. Chases are hazardous. Chasing a bicyclist is not recommended. You could be injured or the bicyclist could be injured in a serious bike accident. Remember your job is to promote and encourage bicycle safety.

      1. In an authoritative voice tell him to stop now.

      2. If he does not stop, continue to follow him, however, do not go through stop signs, red lights, etc. in an effort to catch him.

      3. If you cannot keep up with him let him go.

      4. Chances are very good he will continue to violate traffic laws and you will see him again.

      5. If you see him at a later date and you can positively identify, obtain the name, address, etc. and give the information and an account of what happened to your supervisor.

   b. You see six bicyclists disobey a stop sign. Should you try to stop all of them, or just stop one or two?

      1. Tell all of them to stop. Then write six different tickets.

      2. If they will not all stop, write tickets for the ones who did stop, and get names of the ones who did not stop. Give the information and an account of what happened to your supervisor.

      3. If all six bikes run on you follow procedures in #1.

c. A bicyclist is stopped, you give him a ticket, he rips the ticket up, what should you do?

   1. On the two remaining copies you have, check bad attitude and write on the ticket that the bicyclist ripped the ticket up. This information will be used later if the bicyclist is referred to court. If will also be on the copy of the ticket which is sent to the bicyclist's parents.

d. If a bicyclist will not stop for you, but is not running on you, what should you do?

   1. Ride alongside bicyclist and try to convince him verbally that he should stop.

   2. If he continues, simply follow him until he stops.

e. You stop a bicyclist, and he runs into his house, should you follow?

   1. Do not follow. Go to door, ring bell, and talk to parent. If no one answers the door, take address down, and notify your supervisor.

f. You stop a young child who disobeyed a stop sign near his house. As you are talking to him he starts to cry, what should you do? Should you give her a ticket?

   1. Be very understanding, explain to him that you are not going to hurt him, you just want to talk to him about bike safety, explain the hazards of disobeying stop signs.

   2. In most cases do not give a ticket, if he was this upset, chances are he will not make the same mistake again.

g. You stop a bicyclist and the child's parent comes out of the house quite upset that you, a uniformed person, stopped her child. She claims that you are harrassing her child. She yells at you and makes comments like, "don't you have anything better to do," "pick on someone your own size," etc. What should you do?

   1. Explain to the parent that her child violated a traffic law and that your job is to ensure bicycle safety. Decide whether to ticket or warn the child. Do not let the parent make your decision for you.

h. You see a bicyclist violate a traffic law, you stop the bicyclist and realize she is a friend or neighbor, what should you do?

   1. In an ideal situation, this should not influence your decision, however, realistically, it may.

i. What should you do if you suspect the bicyclist is giving you a fake name while you are filling out the ticket?

   1. Ask them to repeat their name, date of birth, address, phone number. If they have given you false information, they probably will not be able to correctly repeat it.

2. Run a cross directory check which means the dispatcher can check the street address given to you by the bicyclist. The dispatcher will be able to tell you if the address does in fact exist, and the last name of the resident.

3. If you have a portable radio you can have the dispatcher (in most areas) check the bicyclist's license number, which will indicate the registered owner's name.

4. In small communities a telephone directory can be carried in a bike bag and you can check the name and address given to you.

5. If you have determined that the bicyclist has given you false information tell the bicyclist you want correct information - then re-check the name he/she gives you. If the bicyclist persists in giving you fake information then call for assistance.

j. What should you do if the bicyclist refuses to give you the information you are requesting?

   1. Explain why you need their name and address, if you are still unsuccessful, call for assistance.

OTHER SITUATIONS

1. Several people call you pig, and obscene words, what should you do or say?

   a. Ignore them, remember, they do not know you, they are directing their comments at your job and uniform. Do not take these as personal insults. If you become angry it will make the situation much worse. If you are upset, ride to a quite area and cool off.

2. You stop someone who appears violent. He threatens to hit you, kill you, etc. What should you do?

   a. If you believe the threat is real, leave the area immediately. As you are leaving, if possible call for assistance.

   b. If the individual hits you and you cannot get away, defend yourself by blocking blows; do not hit back. Call for help.

   c. If you hit someone it could be considered brutality and assault charges could possibly be brought against you.

3. You are riding down the street and kids start throwing rocks, apples, etc. at you. What should you do?

   a. If the objects hit you, and you are hurt, call for assistance.

   b. If you are not hurt, sometimes it is better to just leave the area. Situations can esculate depending upon your reations. Notify your supervisor.

4. You need immediate assistance from an officer, but you do not have a radio, what should you do?

   a. Find the nearest phone and call the station.

5. As you are patrolling you see someone committing a crime; ex., two suspicious people are crawling into a house through a window.

   a. Notify the dispatcher immediately. Wait in area, and get a good description of person(s), notify the responding police units of any developments. Do not attempt to stop or apprehend anyone. You are not trained in police work.

6. You have sotpped to talk with a group of kids, when you realize someone has taken your ticket book, what should you do?

   a. Try to find out who took the book and where it is. If you find out who took it, but you are not able to get it back, contact your supervisor or have an officer meet you. Let the officer handle the situation since this constitutes theft.

7. What should you do if you fall off your bike, or are hit by a car?

   a. If you are ever hit by a car, have a squad come to the scene and write an accident report even if you are not hurt. If you just fall off and do not need immediate medical attention, report the incident to your supervisor. (special forms may have to be filled out.)

8. While you are patrolling an automobile circles the block several times and calls you obscene names, what should you do?

   a. Nothing, unless, you believe the driver may try to harm you.

9. You violate a traffic law by mistake, and someone approaches you about it. What should you do?

   a. Tell them they can contact your supervisor, and give them your badge number, and supervisor's name, and phone number.

10. You stop a bicyclist, do a routine stolen bike check, and find that the bicycle is indeed stolen. What should you do?

    a. Call for assistance. Do not try to hold suspect. If you can, follow the suspect, radio location to officer responding.

11. What should you do if you see a traffic accident?

    a. Check for injuries, call dispatcher with location, tell the dispatcher whether there are injuries or not. Do what you can for the injured until police/rescue units arrive.

12. A 17 year old becomes very disruptive at a seminar, you tell him to leave, but he refuses. What should you do?

    a. Call for assistance; have individual removed.

WHAT TO ENFORCE

ATTACHMENT E

ENFORCEMENT GUIDELINES FROM THE WISCONSIN MODEL POLICY

BICYCLE ENFORCEMENT GUIDELINES*

Introduction

This manual is designed to serve as a guide to achieve uniform enforcement of Wisconsin's traffic laws.

It is not the intent of this manual to supplement the judgment of the officer as it is impossible to foresee every conceivable situation involving traffic violations. Rather, the intent is to provide guidelines for uniform enforcement action for routine situations. In unusual circumstances, where normal procedures would not apply, the officer must decide what enforcement action is proper by drawing on his/her training, experience and good judgment.

The list in this guide includes violations specified in the Wisconsin Motor Vehicle Laws (1973-1974) Manual.

---

*Source: Wisconsin Council on Traffic Law Enforcement, Model Policy and Procedure Guidelines.

BEST COPY AVAILABLE

BICYCLE ENFORCEMENT GUIDELINES

Violation	Section	Arrest	Warn
Failure to obey officer	346.04(1)	Intentional violations	Did not understand, see or hear
Fail to obey official sign	346.04(2)	Intentional violation or causes serious interference with traffic	Speed slower than walking pace
Fleeing an officer	346.04(3)	All violations	None
Overtaking & passing bicycles	346.075	If less than 3 ft. clearance & accident results or causes evasive action	If distance is uncertain
Bicycle on freeway or I-System	346.16(2)	Interferes with traffic	No interference with traffi
Fail to yield at controlled intersection	346.23(1)	Driver causes accident or pedestrian must run or jump to avoid being struck. Pedestrian crossing on Green or walk signal	Pedestrian must stop or step aside to avoid vehicle
Fail to yield controlled intersection on divided highway	346.23(2)	As above	As above
Failure to yield right-of-way to pedestrian	346.24(1)	Involved in accident or pedestrian must run or jump to avoid being struck	Pedestrian must stop or step aside to avoid vehicle
Sudden movement of pedestrian into roadway	346.24(2)	Sudden movement causes motorist to take evasive action or causes accident	All other violations.
Fail to follow turn marker-buttons-sign	346.31(1)	Caused other vehicle to take evasive action or caused accident	All other violations.
Unlawful right turn	346.31(2)	Turned from wrong lane or wide turn which interfered with other traffic traveling in same direction	Obvious violation but little or no interference
Improper left turn approach	346.31(3) (a)	As above	As above
Improper position intersection	346.31(3) (b)	As above	As above

BEST COPY AVAILABLE

Violation	Section	Arrest	Warn
Improper left turn completion	346.31(3)(c)	As above	As above
Unlawful left turn on 3-lane highway	346.31(4)	Turned from wrong lane and interfered with other traffic traveling in same direction	As above
Improper turn into private driveway	346.32	As above	As above
Unlawful left turn(position or signal)	346.34(1)	Action seriously interfered with other traffic	No signal or late signal. Could have affected traffic present.
Fail to give stop or slow signal	346.34(2)	Action seriously interfered with other traffic	No signal or late signal. Could have affected traffic present.
Fail to yield right-of-way at signal light	346.37(1)(a)1	Caused evasive action or accident	All other violations
Fail to stop on yellow light	346.37(1)(b)	None	Signal turned red while in intersection
Fail to stop for red light	346.37(1)(c)1	Had not reached stop line when signal turned red	None
Fail to yield on green arrow	346.37(1)(d)1	Caused evasive action or accident	All other violations
Failure to stop for flashing red light	346.39(1)	Slowest speed greater than walk speed (3 mph)	All other violations
Fail to stop railroad crossing-officer or employee signal	346.44(1)(a)	Could have stopped after stop signal displayed	All other violations
Failure to obey railroad signal	346.44(1)(b)	As above	As above
Drives around railroad crossing barrier	346.44(2)	All violations	None
Fail to stop at stop sign	346.46(1)	Failed to stop. Slowest speed was faster than walk	No stop; slowest speed was less than walk speed
Fail to stop at stop line	346.46(2)(a)	Caused evasive action or accident	All other violations

BEST COPY AVAILABLE

Violation	Section	Arrest	Warn
Fail to stop before crosswalk	346.46(2)(b)	As above	As above
Fail to stop before entering intersection	346.46(2)(c)	As above	As above
Fail to stop for stop sign at railroad crossing	346.46(3)	Fail to stop. Slowest speed faster than walk	All other violations.
Fail to stop for stop sign in mid-block	346.46(4)(a)	Failed to stop. Slowest speed was faster than walk	As above
Fail to stop emerging from alley or driveway	346.47(1)	No stop. Crossed existing sidewalk or alley at greater than walk speed	All other violations.
Fail to stop at intersecting alley	346.47(2)	As above	As above
Failure to stop for school bus	346.48(1)	All violations	None
Unreasonable and imprudent speed	346.57(2)	Accident or near accident where speed is direct cause. Other traffic affected. Any speed greater than is safe or reasonable and prudent under the existing conditions, any accident where speed is a direct cause.	Excessive speed to posted limit, but no accident or near accident , no other traffic affected. Any speed less than arrest tolerance.
Fail to reduce speed appropriately	346.57(3)	Special hazard, hills, curves, pedestrians, weather, roads or other traffic requires reduced speed. Fails to reduce speed, accident or near accident	All other violations
Speeding in school zone	346.57(4)(a)	Accident or near accident	All other violations
Speeding through school crossing	346.57(4)(b)	As above	As above
Speeding past safety zone	346.57(4)(c)	As above	As above
Speeding in alley	346.57(4)(d)	As above	As above
Speeding on city streets (25 mph)	346.57(4)(e)	As above	As above

BEST COPY AVAILABLE

Violation	Section	Arrest	Warn
Slow moving vehicle fail to yield right-of-way	346.59(2)	Continuing violation in aggravated situation. No opportunity for traffic to pass	As above
Failure to report accident	346.70(1)	All violations	None
Failure to file report of accident	346.70(2)	All violations	None
Permit unauthorized operation (parent)	346.77	All violations	None
Play vehicle on roadway	346.78	Causes accident or near accident	All other violations
Illegal bicycle operation-no seat	346.79(1)	Causes accident or near accident	All other violations
Illegal bicycle operation-passenger	346.79(2)	Causes accident or near accident	All other violations
Illegal bicycle operation-load restriction	346.79(3)	As above	As above
Bicyclist clinging to vehicle	346.79(4)	As above	As above
Fail to keep to the right-bicyclist	346.80(1)	As above	As above
Fails to ride in single file	346.80(2)	As above	As above
Fail to use bicycle path	346.80(3)	As above	As above
Riding bicycle on bicycle lane	346.802(1)([illegible])	Causes accident or near accident	All other violations
Entering or leaving bicycle lane	346.802(2)(2)	As above	As above
Audible signal required/bike lane	346.802(3)	As above	As above
Yield right-of-way/bike lane	346.802(4)	As above	As above
Audible signal required/bikeway	346.803(1)(a)	As above	As above

BEST COPY AVAILABLE

Violation	Section	Arrest	Warn
Obeying traffic signals/ bikeway	346.803(1)(b)	As above	As above
Ride on right side of bikeway	346.803(2)	As above	As above
Yield right-of-way/ bikeway	346.803(3)	As above	As above
Riding bicycle on sidewalk/ yielding & audible signal	346.804	Causes accident or near accident	All other violations
Improper or no lights on bicycle	346.81(1)	As above	As above
Improper or no brakes on bicycle	346.81(2)	As above	As above
Motor vehicle driving on sidewalk	346.94(1)	All violations	None
Cyclist clinging to vehicle	346.94(10)	All violations	None
Towing sleds, etc.	346.94(11)	All violations	None
Motor vehicle driving on bicycle lane or bicycle way	346.94(12)	All violations	None

BEST COPY AVAILABLE

Adjudication

This section addresses program adjudication issues -- what happens after the warning or citation by the enforcement personnel. Included are approaches for handling adult as well as juvenile bicycle offenders, along with specific examples of ticket forms, letters to parents, safety seminar outlines, bicycle court proceedings, etc. that have been implemented in various communities with enforcement programs.

The Adult Bicyclist

While most programs of bicycle law enforcement center on the juvenile bicyclist, the increasing popularity of the bicycle as a legitimate transportation mode for adults has forced attention on this group of riders as well. This is particularly true in those cities and towns having a large population of college or university students (e.g., Madison, Wisconsin; Ann Arbor, Michigan; and Davis, California).

The simplest and most frequently followed approach to dealing with adult bicyclists observed violating the law is to issue a regular traffic citation or warning using forms already available for motor vehicle related offenses. In the case of a traffic citation, the offender would be required to follow up in the usual manner by attending traffic court and/or payment of a fine.

In order to encourage officers and patrollers to issue tickets to bicyclists, some jurisdictions have reduced the amount of the fine. For example, in Cranford, New Jersey, fines for adult bicyclists average $15.00, and in Davis, California, fines generally run from $5.00 to $10.00. Also, at least one area in the state of Massachusetts has experimented with treating a bicycle violation as a nonmoving violation, the same as a parking ticket. The offender then has only to mail in the required fine, usually a couple of dollars, with no appearance in court. While this approach has been particularly well received, at least in Massachusetts it did require passage of special legislation in the state general assembly.

A few localities have offered the adult bicyclist offender an alternative to attending traffic court and/or paying a fine. As one example, the University of California at Santa Barbara has for a number of years operated an Adult Violators Class which the errant bicyclist can attend in lieu of a court appearance or fine. The three-hour class incorporates a pre-class quiz, a group discussion of each participant's citation, a 30-minute slide presentation focusing on a variety of bicycle safety issues, a showing of the film Only One

Road, a possible guest speaker, and a post-test and final course evaluation (1). Attachment A at the end of this section includes some relevant sample materials.[1]

The approach of ticketing adult bicycle offenders usually works well so long as regular police officers are carrying out the enforcement duties. However, in localities using young persons as bike patrols, problems can arise stemming from the adult cyclists' lack of respect for these "unofficial" representatives of the police force. In Madison, Wisconsin, where two-thirds of the citations for one year were issued to adults, patrollers at times had to use their walkie-talkies to call for police assistance in stopping a fleeing bicyclist or to deal with hostile cyclists. Programs using bike patrols should be aware of this potential problem and offer specific guidelines for dealing with it (see Attachments D and E, "What to Enforce"). Alternatively, the patrol's interaction with adult violators could be limited to warnings only. This is the approach opted for by the Richfield, Minnesota Police Department. It is also the only option available for the Ann Arbor, Michigan bike patrol, since Michigan state law was recently revised to only allow police officers with at least 300 hours of training to issue a traffic citation.

The Juvenile Bicyclist

The creative aspect of a bicycle enforcement program comes in its approach to handling the juvenile offender. Here there are many options, as even a cursory review of the Section II program descriptions will reveal. Basically, these options fall into one of the following four categories:

1. Verbal or written warning only.
2. Warning and letter to parents.
3. Attendance at safety seminar, group meeting, etc.
4. Appearance before special juvenile traffic court or peer court.

Each of these approaches to juvenile adjudication is further examined in the subsections that follow. It should be noted that, in practice, many programs incorporate a mixture of these approaches, depending on the nature of the violation and the attitude and past history of the violator. For example, a first time offender may receive only a warning, whereas a second or third time offender would be required to attend a meeting with the juvenile hearing officer.

---

[1] For more complete documentation the interested reader is referred to the full report on the Santa Barbara County Bicycle Safety Project (1), Volume I, pages 29-56.

1. Verbal/Written Warnings. Most all enforcement programs allow the enforcing officer the option of simply stopping the offending bicyclist and talking with him about his behavior, why it is dangerous, etc., without any written citation or follow-up. Generally these and other sorts of "friendly" stops make up a large proportion of the patrolling officer's contacts with the public. For example, patrollers in Madison, Wisconsin averaged one citation every six hours of patrol but reported five contacts with bicyclists for each hour on the job (2). And in Richfield, Minnesota, during the 1980 summer enforcement campaign, patrols issued 600 tickets as compared with 2300 total enforcement contacts (3).

For some bicycle enforcement programs, a verbal or written warning is effectively the only action that can be taken against an offending bicyclist. This is the situation in Michigan, where under state law the Ann Arbor bike patrols could not issue a traffic citation. However, for most of the programs reviewed, further options for remedial action are available.

Although a few police departments with bicycle enforcement programs use their regular citation forms for juvenile bicyclists, most have developed a separate "bicycle violation notice." These notices are usually made up in duplicate or triplicate so that copies are available for the child, his parents, and police department records. Attachment B contains several examples of bicycle violation notices used in the Santa Barbara (California), Hastings (Minnesota) and "Yourtown U.S.A." bicycle enforcement programs. Also included here is the form recommended in the Wisconsin guidelines for bicycle safety programs.

2. Written Warning and Follow-up Letter. As the above discussion has indicated, most enforcement programs would at least follow up a juvenile warning notice with a letter to the child's parents informing them of the violation and requesting their cooperation in seeing that their child knows and practices rules for safe bicycling. Appropriate safety materials, including a copy of the city ordinance, tips for safe bicycling, etc., would usually accompany this letter. In some instances the letter might also request that the parent instigate certain remedial actions, such as witholding use of the bicycle for a certain number of days.

Sample follow-up letters that simply notify parents of their child's violation and solicit support in teaching safe bicycling are contained in Attachment C. Other sample follow-up letters, including those that request attendance at a safety school or appearance before a bicycle court, are referenced in the appropriate sections below.

3. Attendance at safety seminar, group meeting, etc. Most bicycle enforcement programs have somewhat stronger approaches to juvenile adjudication than the simple warning or letter to parents described above, particularly for serious or repeat offenders. Those approaches that fall into the general area of "educational classes" are described in this section. Included here are bicycle safety seminars (violators seminars, safety classes, etc.) and individual or smaller group conferences with the bicycle safety officer, juvenile traffic officer or other appropriate program personnel.

Seventeen of the 24 Minnesota communities receiving funding for bicycle safety programs during 1979-1980 incorporated a safety seminar or clinic for juvenile adjudication. These seminars focused on: (1) educating the young bicyclist concerning bicycle traffic laws and safe driving procedures, and (2) developing positive attitudes toward bicycle safety. The seminars have also been designed to give young people and their parents a better understanding of police work and appreciation for law enforcement activities.

The Richfield, Minnesota bicycle safety program can be offered as an example. The seminars are conducted by members of the bicycle patrol with a supervisor present. They are held two or three times each week during the summer months and are usually attended by approximately 25 youths. The seminars are directed at one of two age groups, either 7-12 or 13-17 year olds. Jean Davis, who heads the program in Richfield, offers the following overview of the seminar:

> The seminar begins with an introduction of bike patrols, an agenda for the one hour to an hour and a half seminar, and an explanation of the bike program. They are then given a written pre-test. They are told that they will be given the same test at the end of the seminar, and must receive a passing score, or be requested to stay after the seminar is over for special tutoring.
>
> One purpose of the test is to demonstrate to the young people that they do not know everything there is to know about bicycle safety. Another purpose is to ensure that they listen to areas discussed. (All of the answers to the test questions are given during the seminar.) The areas covered in the seminars include bicycle-traffic laws and safety procedures, how bike accidents occur and how they can be prevented, bicycle

> maintenance, or safety checks, and bicycle theft prevention. We also have a section on pedestrian accidents. We have a slide presentation of intersections and streets in Richfield which the youths can identify with. We also use various movies, and a bicycle. The slide presentation covers traffic laws and safety procedures. We use an overhead projector to diagram bike accidents and a chalk board for youths to explain to the group bicycle or pedestrian accidents they have been victims of, or any near misses the youths wish to diagram and discuss. A bicycle is used to demonstrate safety checks, and to show the proper way of locking a bicycle. Movies are used to reinforce items discussed. After all the areas are covered the post test is given, collected, and corrected by the bicycle patrols. The bicycle patrols then take each test and sit down with each youth to talk about their test and any questions about bicycle safety. Then attendance is taken and the youths are dismissed. The youths that failed the test are then given special tutoring, which consists of reviewing traffic laws and safety procedures and accidents with them. (4)

For the Richfield program, attendance at the seminars is "requested." (Attendance by the youth's parents is encouraged but not required.) By law offenders cannot be required to attend seminar. They are "requested" to do so but do have the option of going directly to court. The seminar is thus an opportunity to avoid court. A youth is given three opportunities to schedule and attend a seminar, and after this his case is referred to the county's juvenile traffic court. Second time offenders can attend a second seminar, but third time offenders are referred directly to the court. The situation in Hastings, Minnesota is similar except that seminar attendance is usually only "requested" for repeat offenders. Sample materials from the Hastings program are given in Attachment D.

As a supplement to their "Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities" (5), the Wisconsin Governor's Office of Highway Safety has developed a quite detailed set of guidelines for a bicycle safety school. Portions of these guidelines are reproduced as Attachment E. They include an introduction to the objectives of the class, a course outline, a set of discussion group guidelines, a bicycle driver test, a bicycle driver charge, a list of suggested films, and "Rules to Live By."

Other localities have experimented with bicycle safety seminars, but little documentation is available from which to learn. The Temple City bicycle enforcement project, which ran from 1970-1972, incorporated a Saturday morning safety class conducted by the community traffic safety officer on an as needed basis. Minors were required to be accompanied by a parent or guardian. A bicycle safety seminar was also a feature of the Morton Grove, Illinois bicycle safety program, but only 13% of the violators cited ever attended. As a final example, the Santa Clara project featured a bicycle safety class taught by specially trained police officers to violators 13-17 years old (or younger in the case of repeat offenders).

In way of summary, the successful bicycle safety seminars generally incorporate some mechanism for requiring or at least strongly encouraging attendance. They are geared to the age group in attendance and are generally limited to 25 or fewer participants. Classes are held on Saturday mornings or interspersed throughout the week and can be conducted by the bicycle safety officer, by trained police officers, or by young persons serving on the bike patrol. A typical seminar includes a pre and post test interspersed by a variety of safety-oriented presentations and group discussions. Slide presentations and film strips are often presented, and where possible examples are drawn from familiar locations and sites within the community. Above all, the seminars are educational, never punitive.

Whereas the safety seminars are geared towards handling a fairly large number of cases, the conference sorts of meetings generally involve only a single violator or small group of violators. Because of this they can be more flexible and more tailored to the violator's individual needs. Violators are usually required to be accompanied by a parent or guardian, and the meeting is most likely to be hosted by either the bicycle safety officer or the juvenile hearing officer at the local court.

Provided the case load is not too great, conferences can be used as a primary means of adjudication. However, in most situations a conference is scheduled only after other adjudication efforts have failed. For example, juvenile bicycle violators in Cranford, New Jersey typically receive only a warning citation followed by a letter to their parents, but repeat offenders are scheduled for a conference with the juvenile safety officer. Similarly, the Davis, California bicycle safety program, operational since 1964, will usually schedule a violator to attend a group meeting similar to a seminar, but in the case of subsequent violations may require an appointment with the bicycle safety hearing officer or, for the more difficult cases, the juvenile traffic hearing officer.

4. Peer Courts. While usually considered an innovative approach to juvenile bicycle adjudication, special juvenile traffic courts or peer courts have been around for decades -- witness the Dallas Juvenile Traffic Court

instigated in 1942 and the Concord, California Bicycle Traffic Court dating back to 1959. More recently, peer courts have been incorporated into the Mt. Prospect and Skokie, Illinois bicycle safety programs. These courts attempt to reach the juvenile bicycle offender at his own level -- through his peers -- and through a judicial experience that emphasizes education rather than punishment.

Traffic courts for juvenile bicyclists are generally scheduled for a Saturday morning and are held separate from either the regular adult traffic court or juvenile court. They are not necesarily restricted to bicycle violators. For example, the Dallas Juvenile traffic Court also handles pedestrian and motor traffic violators, and a large percentage of its cases involves the illegal operation of motorcycles and minibikes by underaged riders. The critical factor here, however, is that the young bicycle offender is not tried with adult traffic offenders or with juveniles cited for more serious crimes.

The educational aspect of a peer court is evidenced by the penalties it imposes. Convicted offenders in the Dallas Court are usually sentenced to write a theme on a safety topic related to their offense. The theme must be completed before leaving the court house. Penalties imposed by the Concord Court include writing a composition, copying a section of the bicycle/vehicle code, and/or not being allowed to ride for a certain number of days. Similar sorts of penalties were adopted by the Mt. Prospect and Skokie bicycle peer courts. In Skokie, the usual penalty is an essay assignment or small fine, while in Mt. Prospect it is required attendance at a bicycle safety school.

Both the Dallas and the Concord programs have developed rather extensive guidelines for their peer court operation. The Dallas Court is not connected to a specific program of bicycle law enforcement. It originally functioned under the Office of Traffic Safety as a bicycle court only, but is currently under the auspices of the Dallas Municipal Court. It is convened once or twice each month with perhaps 50 young persons attending each session (20% of these for bicycle-related offenses). Each young person must be accompanied by a parent or guardian. A warrant officer oversees court operation, but the court is staffed by 6-8 representatives of the Police Explorer Scouts. Attachment F contains a fairly detailed description of court operation.

The Concord Bicycle Court is under the direction of the Concord Police Department and is just one aspect of a comprehensive bicycle safety program. The court is convened regularly on Saturday mornings, hearing anywhere from 2-15 cases. Parental attendance is welcomed but not required. The bailiff for the court is a member of the Concord Police Explorer Post, while the justices are selected on a yearly basis from the local high schools. A detailed description of the organization and functioning of the Concord Bicycle Court is found in Attachment G. Included are a number of relevant forms, such as a copy of the bicycle court summons (with information for the parents on back) plus letters to the parents regarding the disposition of the case.

Similarly detailed materials are not available for the two Illinois peer courts. However, Minnesota has developed a planning guide for bicycle traffic courts as part of its overall Bicycle Safety Community Planning Kit (Attachment H). This is a general sort of guide to the use of the court system which might include a peer court, a bicycle traffic court, existing juvenile court or adult traffic court. As noted in the above discussion of safety seminars and group meetings, the majority of the Minnesota programs have implemented some form of a safety seminar. If the Richfield and Hastings programs are representative, the juvenile court system is relied on only in the case of serious or repeat offenders.

Clearly a peer court approach to juvenile bicycle adjudication requires utmost cooperation from the local court system. It also may require passage of a state law or municipal ordinance to grant it the authority it needs to operate. Because of this, a bicycle safety officer considering this alternative should as early in the program planning stage as possible establish a good working relationship with his community's local governing body and court personnel.

References

1. University of California at Santa Barbara Police Department. Santa Barbara County Bicycle Safety Project. Volume I. Report prepared for the California Office of Traffic Safety, October 1979.

2. Cardarella, S. and Rankin, R. Bike Patrols Peddling Safety. Madison, Wisconsin: Madison Police Department Safety Education Office, Fall 1980.

3. Wagner, S. 1980 Community Bicycle Safety Program: Final Report. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, 4-H Youth Development Office, January 1981.

4. Davis, J.E. Richfield Public Safety Department Bicycle Safety Program. Richfield, Minnesota: Department of Public Safety, (n.d.).

5. Hurley, J.L. and Thompson, R.L. Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities. Madison, Wisconsin: Division of Highway Safety Coordination, January 1973.

ADJUDICATION

ATTACHMENT A

SANTA BARBARA
BICYCLE VIOLATOR CLASS
FOR ADULTS

*Source: University of California at Santa Barbara Police Department, Santa Barbara County Bicycle Safety Project, 1979.

BICYCLE VIOLATOR CLASS*

Purpose

To provide violators of bicycle traffic laws class instruction which allows them to meet the requirements of a court order pursuant to California Vehicle Code 42005.

Court Ordered Driving Instruction CVC 42005: The Court may order any person convicted of a traffic violation to attend a school for traffic violators or a driving school . . . for instruction in the operation of a motor vehicle consistent with the provisions of this code. Any person so ordered may choose the school for traffic violators or licensed driving school he will attend. Any person who willfully fails to comply with such order is guilty of a misdemeanor.

Objectives

Through three hours of classroom instruction, the student will develop an understanding of the following:

1. The nature and severity of the bicycle accident problem.
2. Bicyclist and motorist behavior factors causing bicycle accidents.
3. Bicycle and motor vehicle factors causing bicycle accidents.
4. Environmental factors causing bicycle accidents.
5. Safe bicycling: a responsible attitude towards safe and proper use of a bicycle on facilities, among a mix of users.

Criterion Test

The methods for evaluating the effectiveness of the Bicycle Violators Class are:

1. Pre-test covering the student's knowledge and attitudes towards safe bicycling principles prior to presentation of class instruction.
2. Post-test covering the student's knowledge and attitudes towards safe bicycling principles after presentation of class instruction.
3. 24 month analysis to determine the per cent of bicyclists who repetetively violate traffic laws after attending the class.
4. Class evaluation questionnaire to be given to each class participant.

CLASS PROCEDURES

1. When the officer issues a citation he/she will inform the individual that he has the option of attending a Bicycle Safety class in lieu of paying the fine. The violator is given an information slip along with the citation and is asked to call the Police Department within 3 working days.

2. When the citation is received by the UCSB Police Department Records Office, the name of the offender will be researched to determine the number of bicycle violations the individual has received in the past 24 months. This number will be recorded and attached to the citation.

3. The Police Department clerk will have a scale of fines appropriate to the number of bicycle citations received in the last 24 months. This scale will be set by the Traffic Court Referree.

4. When the offender inquires as to the amount of bail he/she will be told the amount in accordance with the scale. The individual will be given three options: (1) pay the fine, (2) attend the Violators Class, (3) contest it in court.
   (a) If the individual chooses to attend the class, his/her name and address will be put on a registration list. The class may only be attended once.
   (b) If the person contests the citation and a decision is reached against him/her s/he will again be given the option of attending the class or paying the fine.

5. Each citation will be kept at the Police Department for five days. If the violator has not called to schedule a class date, the citation is forwarded to Municipal Court.

6. When the violator calls the UCSB Police Department Records Office to enroll in the class a letter of explanation is sent concerning the class. In the letter, the individual will be informed that bail will not be waived until the end of the class. If the offender cannot attend, s/he is to notify the UCSB Police Department to reschedule (this can only be done once). If the offender chooses to attend the class, but does not show up and does not call the UCSB Police Department in advance to reschedule, bail will not be waived and must be paid. If the offender is ordered by the court through VC 42005 and does not attend the class, s/he will be guilty of a misdemeanor.

7. Final enrollment will take place on the day of the class.
   (a) If the offender notifies the UCSB Police Department and states that s/he cannot attend the class s/he will be rescheduled for the next available class. This can be done only once.
   (b) If the offender does not appear in class or notify the UCSB Police Department his/her name will be referred to the Municipal Court with bail due.

8. At the completion of the class, the citation will be returned to the offender with no bail due.
   (a) If the offender does not remain for the entire class period, he has the option of attending the next scheduled class or bail will be due.

9. Following the class, the UCSB Police Department will forward all citations not voided by class attendance to Municipal Court.

10. After the offender completes the class, his record at the UCSB Police Department will be stamped. If s/he receives a subsequent violation, this will be noted in the hope of monitoring the effectiveness of the class. The subsequent violation will be noted on the citation and forwarded to Municipal Court.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO　SANTA BARBARA • SANTA CRUZ

SANTA BARBARA, CALIFORNIA 93106

April 18, 1979

Dear

You will be attending the Bicycle Violators Class given by the UCSB Police Department. The class you are scheduled to attend will be given on Saturday, April 28 from 9:00 AM until 12:00 Noon at Girvetz 2120 on the University campus. Your attendance in the Bicycle Violators Class will remove your bicycle citation from your record.

In order for the Bicycle Violators Class to be a mutually beneficial experience, your cooperation and participation will be required throughout the class period. It is required that you arrive promptly at the start of the class and remain until excused by the instructor. If you do not attend the entire class, you will not receive credit and your citation will be forwarded to Municipal Court.

In the event that you cannot attend the class, you must notify the UCSB Police Department at least 24 hours before the class at either 961-3457 or 961-3446. You will then be notified by mail of the time and place of the next scheduled class. Only one class may be cancelled; additional cancellations will result in your citation being forwarded to Municipal Court.

Questions concerning the Bicycle Violators Class may be addressed to:

Patricia Wheatley, Project Coordinator
Santa Barbara County Bicycle Safety Project
University Police Department
Santa Barbara, California 93106

961-3457, 961-2012
Monday through Friday 8:00 - 5:00

BICYCLE VIOLATORS CLASS

The UCSB Police Department is currently offering a class for the recipients of bicycle citations. Each violator may use the Bicycle Violators Class as an alternative to paying the citation bail one time only. Your attendance in the Bicycle Violators Class will remove this bicycle citation from your record.

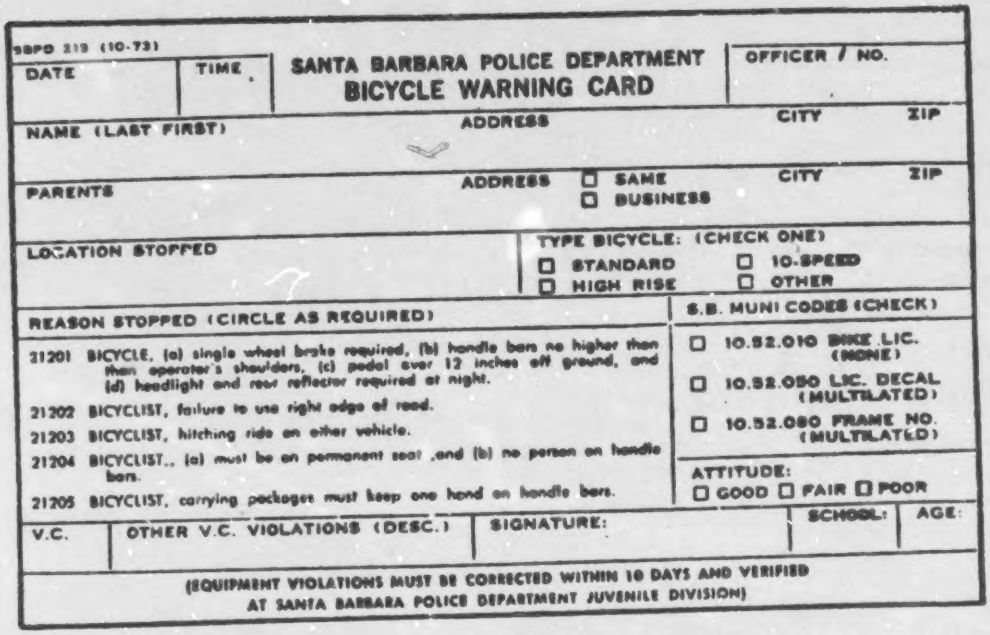
The fines for bicycle citations have been increased, with graduated fines for additional citations accumulated over a 24 month period.

If you wish to attend the Bicycle Violators Class, you must call the UCSB Police Department at 961-3843 between 8:00 am and 12:00 pm within three (3) court working days of the date of the violation. If you do not contact the UCSB Police Department within three (3) working days, your citation will be forwarded to Municipal Court, and you must either pay the bail or appear in court within 15 court working days of the violation.

ADJUDICATION

ATTACHMENT B

EXAMPLE BICYCLE
VIOLATION NOTICES



SBPD 213 (10-73)

SANTA BARBARA POLICE DEPARTMENT

BICYCLE WARNING CARD

DATE	TIME	OFFICER / NO.

NAME (LAST FIRST) ADDRESS CITY ZIP

PARENTS ADDRESS ☐ SAME ☐ BUSINESS CITY ZIP

LOCATION STOPPED

TYPE BICYCLE: (CHECK ONE)

☐ STANDARD ☐ 10-SPEED

☐ HIGH RISE ☐ OTHER

REASON STOPPED (CIRCLE AS REQUIRED)

21201 BICYCLE, (a) single wheel brake required, (b) handle bars no higher than than operator's shoulders, (c) pedal over 12 inches off ground, and (d) headlight and rear reflector required at night.

21202 BICYCLIST, failure to use right edge of road.

21203 BICYCLIST, hitching ride on other vehicle.

21204 BICYCLIST., (a) must be on permanent seat ,and (b) no person on handle bars.

21205 BICYCLIST, carrying packages must keep one hand on handle bars.

S.B. MUNI CODES (CHECK)

☐ 10.52.010 BIKE LIC. (NONE)

☐ 10.52.050 LIC. DECAL (MULTILATED)

☐ 10.52.080 FRAME NO. (MULTILATED)

ATTITUDE:

☐ GOOD ☐ FAIR ☐ POOR

V.C.	OTHER V.C. VIOLATIONS (DESC.)	SIGNATURE:	SCHOOL:	AGE:

(EQUIPMENT VIOLATIONS MUST BE CORRECTED WITHIN 10 DAYS AND VERIFIED AT SANTA BARBARA POLICE DEPARTMENT JUVENILE DIVISION)

Source: Santa Barbara Police Department, Bicycle Enforcement Program, 1973.

BEST COPY AVAILABLE

Source: Hurley and Thompson, Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities, 1973.

☐ PEDESTRIAN VIOLATION NOTICE
☐ BICYCLE VIOLATION NOTICE No.
____________ Department

Name.......................................Address.......................................
Last First Middle Street City State

Parent
D.O.B...............Guardian...
Name Address

Description
of Bike...
Make Color Serial No. Style

Date.......................Time.....................License No...................

Violation......................................Statute/Ord. No...................
(see list on back)

School ....Officer..............................

☐ Moving Traffic Violation
☐ 5 Day Warning - Equipment

The violation must be corrected in 5 days and checked by an officer of the ____________ Department. If the violation is not corrected the matter will be referred to the juvenile court, or in the case of an adult to the City Attorney for further action.

Date of correction..................

Officer's Initials ....
(For office use only)

☐ 1st Violation ☐ 2d Violation ☐ 3d Violation

(front)

(back)

Please circle appropriate violation(s).

BICYCLE VIOLATION

1. Failure to stop for sign or signal
2. Failure to yield right-of-way
3. Failure to signal/improper signal
4. Failure to obey signs (Describe)
5. No light
6. No reflector
7. No brakes
8. Driving two or more abreast
9. Operating over centerline
10. Improper turn
11. Lane deviation
12. Riding double
13. Speed too fast
14. Inattentive driving
15. No hands
16. Wrong way on one way
17. Driving against traffic (on left)
18. Trick riding (Describe)
19. Driving on sidewalk
20. No license
21. Other ____________

PEDESTRIAN VIOLATION

1. Crossing at place other than crosswalk
2. Walking on wrong side of roadway
3. Soliciting ride from roadway
4. Loitering in roadway
5. Walking against Don't Walk light
6. Sudden movement into roadway
7. Other ____________

BEST COPY AVAILABLE

№ 2768

BICYCLE VIOLATION NOTICE*

Name ____________________

D.O.B.: ____________ Age____ Sex ____M ____F

Address ____________________

City ____________________ State________

Parents____________________

Location of Violation ____________________

BICYCLE VIOLATION

Make of Bicycle ____________________

Safe__________ Unsafe__________

____Thru stop sign

____Thru stop light

____Careless riding

____Fail to signal

____Wrong side of street

____Middle of road

____No hands on handle bars

____On sidewalk, where restricted

____Illegal passenger

____No lights

____No rear reflector

____Other ____________________

Violation date____________________ Time__________M

Officer____________________ Date__________

NOTICE

For violation of the above stated ordinance you are hereby notified to appear at

HASTINGS POLICE DEPARTMENT
107 West 5th Street
Hastings, Minnesota 55033

on____________________ at________

____

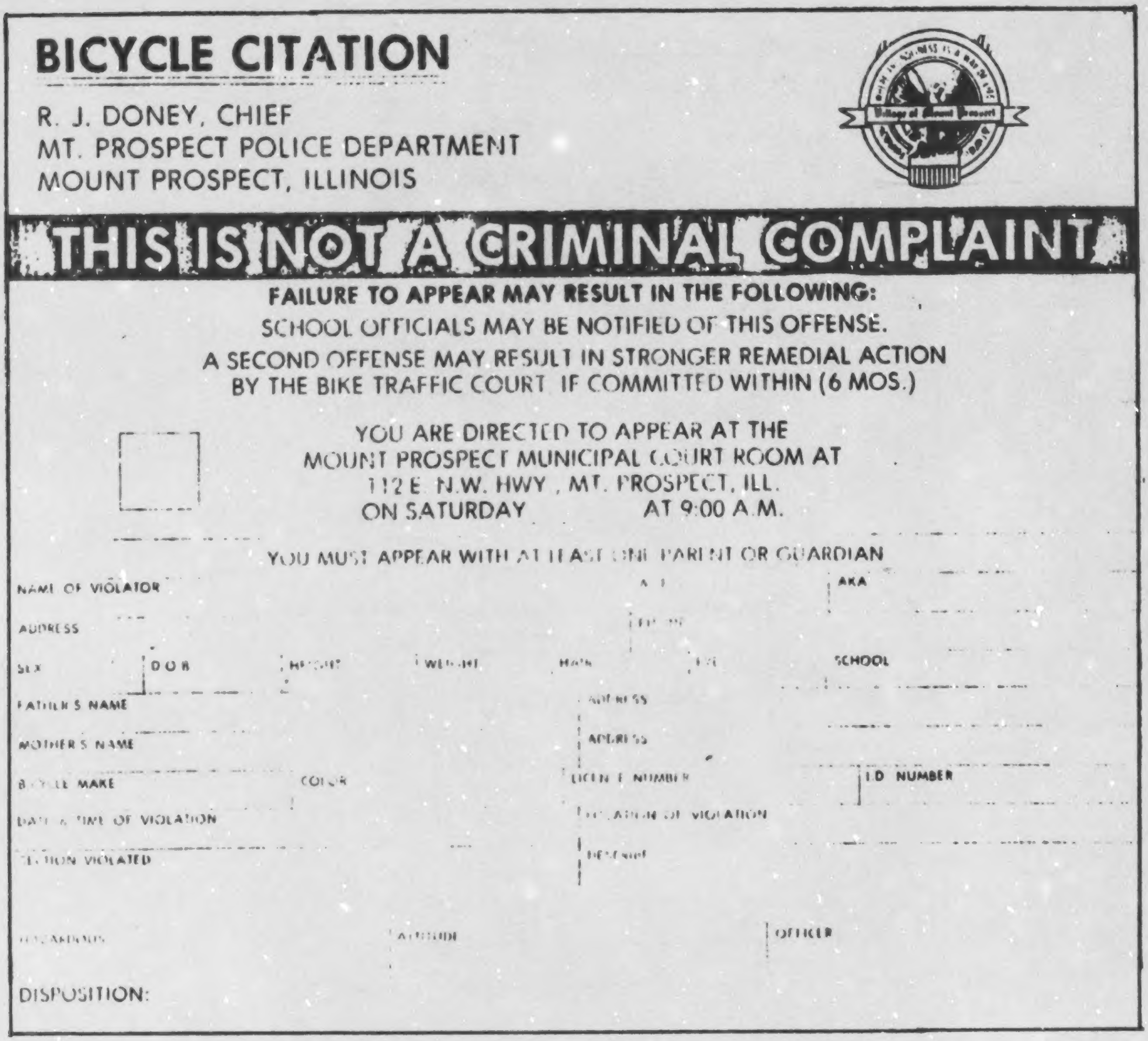
for bicycle safety seminar.

Failure to appear may result in a petition to juvenile court.

BEST COPY AVAILABLE

*Source: Hastings Police Department, Summary. Hastings Bicycle-Pedestrian Safety Program, 1980.

BEST COPY AVAILABLE



BICYCLE CITATION

R. J. DONEY, CHIEF
MT. PROSPECT POLICE DEPARTMENT
MOUNT PROSPECT, ILLINOIS

THIS IS NOT A CRIMINAL COMPLAINT

FAILURE TO APPEAR MAY RESULT IN THE FOLLOWING:

SCHOOL OFFICIALS MAY BE NOTIFIED OF THIS OFFENSE.

A SECOND OFFENSE MAY RESULT IN STRONGER REMEDIAL ACTION BY THE BIKE TRAFFIC COURT IF COMMITTED WITHIN (6 MOS.)

YOU ARE DIRECTED TO APPEAR AT THE
MOUNT PROSPECT MUNICIPAL COURT ROOM AT
112 E. N.W. HWY., MT. PROSPECT, ILL.
ON SATURDAY AT 9:00 A.M.

YOU MUST APPEAR WITH AT LEAST ONE PARENT OR GUARDIAN

NAME OF VIOLATOR | AGE | AKA
ADDRESS | PHONE
SEX | D.O.B. | HEIGHT | WEIGHT | HAIR | EYES | SCHOOL
FATHER'S NAME | ADDRESS
MOTHER'S NAME | ADDRESS
BICYCLE MAKE | COLOR | LICENSE NUMBER | I.D. NUMBER
DATE & TIME OF VIOLATION | LOCATION OF VIOLATION
SECTION VIOLATED | DEFENSE
HAZARDOUS | ATTITUDE | OFFICER

DISPOSITION:

Source: A Proposal for a Three-Phase Bicycle Safety Program in the City of Yourtown.

ADJUDICATION

ATTACHMENT C

SAMPLE FOLLOW-UP LETTERS

*Source: Santa Barbara Police Department, Bicycle Enforcement Program, 1973.

City of Santa Barbara*

California

A. W. TREMBLY
CHIEF OF POLICE

POLICE DEPARTMENT

215 EAST FIGUEROA
MAIL: P.O. BOX 539
SANTA BARBARA
93102

YOUR REFERENCE

IN REPLY REFER
TO OUR CASE No.

Dear

On ____________________, ________________________ was stopped by an officer of the Santa Barbara Police Department for riding a bicycle in violation of California Vehicle Code, or the Santa Barbara Municipal Code, reference the attached, Bicycle Warning Card, SBPD Form No. 215, signed by your youth.

Our purpose is to notify you of the violation and provide bicycle safety information to assist you in teaching your youngster safe bicycle riding habits. Equipment violations such as unlicensed bikes, nonfunctioning headlights, etc., will be recorded with the Santa Barbara Police Department, Juvenile Division. These must be corrected within ten days from the warning date, and verification of correction made at the Department. There will be no further action unless there is a future violation, in which case the matter may be referred to juvenile authorities.

Traffic accident reports show the majority of bicycle accidents in which fatalities and injuries occur, involve persons under age 18. These reports also indicate the bicycle rider is most often at fault, and that the death or injury could have been avoided had the bicyclist observed simple bicycle safety rules.

We believe that with your cooperation this needless bicycle accident toll can be reduced.

Very truly yours,

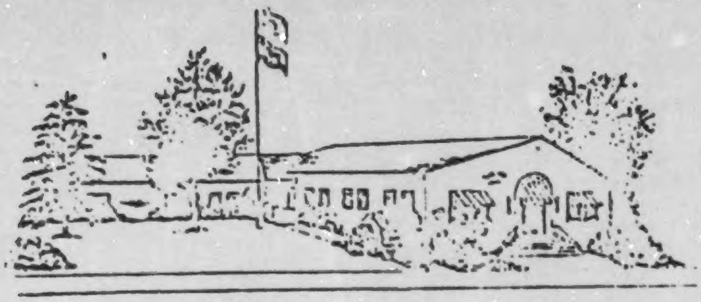
A. W. TREMBLY
Chief of Police

Lt. F. E. Plunk
Project Coordinator
Bicycle Safety Program

BEST COPY AVAILABLE

FEP/pm

(ATTACHMENT C)



CITY OF DAVIS*

226 F Street Davis, California 95616
(916) 756-3740

TO THE PARENTS OF: ______________________________

This is to inform you that your son/daughter has received a bicycle citation.

☐ An appointment has been set for you and your child to appear on ______________________, at 7:30 p.m. in the City Hall Council Chambers, 226 F Street, Davis. This is a group meeting, if your child denies the alleged violation you may contact the Bicycle Citation Hearing Officer prior to the above date to discuss the matter individually.

☐ Since your child is under 12 years of age, and this is his/her first citation, we are asking that you discuss the violation with him/her pointing out the hazards of his/her actions.

☐ As you may recall, you were requested to discuss the first violation with your child. Since it appears the child has not responded to this disposition, we request that you and your child appear at the appointment scheduled above.

☐ This is to confirm our telephone conversation regarding rescheduling an appointment for your son/daughter with our Bicycle Citation Hearing Officer. Failure to appear at this appointment will result in the matter being referred to the Juvenile Traffic Hearing Officer at the Davis Justice Court.

☐ During his/her appearance for counseling on the last citation, he/she was advised the next violation would be handled by the Juvenile Traffic Hearing Officer at the Davis Justice Court. As a result of this citation, disposition of same will be handled by the Davis Justice Court, 424 3rd Street, Davis. You will receive notice from them as to time and date of your appearance.

If you have any questions regarding this matter, please contact the Davis Police Department, Youth Services Division at 753-3600.

Sincerely,

B. D. BARTHOLOMEW
Chief of Police

Enclosure: ☐ Copy of Citation

☐ Copy of Bike Ordinance

BEST COPY AVAILABLE

*Source: Pelz, Bicycle Programs: City of Davis.

*Source: Hurley and Thompson, Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities, 1973.

(First Violation Letter)

Dear Parent or Guardian: *

_____________________ was issued a Bicycle Citation for the following violation ______________________________. This occurred on ______(date)______ Time _________________ Location ____________ __________________________.

The purpose of this ticket is to impress upon the juvenile bicycle operators, a proper regard for the rules of traffic safety thereby enabling them to protect their own lives as well as the lives and property of others. We believe that the experience they receive in connection with their receiving this ticket will be of real value to them as they grow older and graduate from bicycles to automobiles.

By assisting your child to cultivate courteous, sensible safety habits, you will be spared many anxious moments and your child will enjoy to the fullest all of the pleasant and healthful experiences of bicycling.

You, as a parent, can further assure your child of a happy, carefree cycling fun by periodically checking the mechanical condition of his or her bike, since faulty equipment can also cause serious injury.

Police-parent cooperation is necessary in the interest of the safety of your child.

Respectfully,

- -

Dear Parent or Guardian: (Second Violation Letter)

_____________________ was issued a Bicycle Citation for the following violation ___________________________. This occurred on _____________________ Time ______________. Location ______________ _____________________.

This is the second violation within one year. A letter was sent to you when the first violation occurred and no legal action was taken.

The child must be taught his or her responsibility to obey the bicycle laws of ________(city)__________.

The law places responsibility on the parent. Wisconsin State Statute No. 346.77 states: "No parent or guardian of any child shall authorize or knowingly permit such child to violate any of the provisions of state statute regarding bicycle regulations."

Therefore, this department requests your cooperation by impounding your child's bicycle for a period of 14 days starting _________________ and ending _________________.

Please help us keep the bicycle driver safe.

Respectfully,

(Bicyclist First Violation Letter)*

Dear Parent or Guardian:

____________________________ was issued a Bicycle Violation Notice
for the following violation____.
This occurred on ________(date)________ Time________________________
Location____

The purpose of this notice is to impress upon juvenile bicycle operators a proper regard for the rules of traffic safety thereby enabling them to protect their own lives as well as the lives and property of others. We believe that the experience they receive in connection with their receiving this notice will be of real value to them as they grow older and graduate from bicycles to automobiles.

By assisting your child to cultivate courteous, sensible safety habits, you will be spared many anxious moments and your child will enjoy to the fullest all of the pleasant and healthful experiences of bicycling.

You, as a parent, can further assure your child of happy, carefree cycling fun by periodically checking the mechanical condition of his or her bike, since faulty equipment can also cause serious injury.

In the interest of safety, talk with your child and explain the rules we must follow when using our streets and highways. Enclosed is a pamphlet explaining safe bicycle driving rules. Through cooperation between the Police Department and parents, we can make this a safe bicycle driving community.

Your cooperation in this matter of mutual concern is greatly appreciated.

Sincerely,

*Source: Wisconsin Council on Traffic Law Enforcement, Model Policy and Procedure Guidelines.

ADJUDICATION

ATTACHMENT D

HASTINGS, MINNESOTA
BICYCLE SAFETY SEMINAR

BICYCLE SAFETY SEMINAR*

IN THE PREVIOUS THREE YEARS OF THE PROGRAM, BICYCLE SAFETY SEMINAR WAS CALLED BICYCLE SAFETY COURT. THE NAME WAS CHANGED SO THAT HASTINGS WOULD BE UNIFORM WITH THE REST OF THE STATE, ALSO BICYCLE SAFETY SEMINAR IS A MORE FITTING DESCRIPTION OF THE SESSION WHICH WAS HELD APPROXIMATELY EVERY WEEK AND A HALF.

BICYCLE SAFETY SEMINAR WAS REQUIRED FOR THOSE BICYCLISTS WHO RECIEVED A TICKET AND DISPLAYED A POOR ATTITUDE, OR THOSE WHO HAD RECIEVED MORE THAN ONE TICKET RETROACTIVELY. THE SEMINAR ITSELF CHANGED LITTLE IN CONTENT. IT INCLUDED A SLIDE PRESENTATION ON BIKE MAINTENANCE, ROAD AND WEATHER CONDITIONS, PHYSICAL AND MENTAL CONDITIONS, THE TOP TEN CAUSES OF BIKE-CAR ACCIDENTS, AS WELL AS BIKE RULES AND REGULATIONS, OR A FILM WHICH INCLUDED THE ABOVE. AFTER THE PRESENTATION A TALK BY THE SAFETY OFFICERS WAS GIVEN. A NEW TEST WAS DESIGNED TO BE GIVEN AFTERWARDS, AND ON OCCASION A PRE-TEST WAS GIVEN FOR THE PURPOSE OF COMPARING SCORES TO DETERMINE IF SOME AREAS WERE INADEQUATELY COVERED. ONE TEST FORM WAS ISSUED TO ALL VIOLATORS UNLESS THEY WERE TOO YOUNG TO UNDERSTAND THE QUESTIONS. IN THOSE CASES, WHICH WERE RARE, THE SAFETY OFFICERS WENT OVER A TEST DESIGNED FOR YOUNGER CHILDREN. BICYCLE SAFETY SEMINAR WAS HELD FOR AN HOUR.

APPROXIMATELY 133 VIOLATORS APPEARED AT BICYCLE SAFETY SEMINAR. SIXTY-TWO ADDITIONAL PEOPLE, INCLUDING PARENTS, FRIENDS AND OTHER FAMILY MEMBERS ATTENDED THE SESSIONS. VIOLATORS THAT FAILED TO APPEAR FOR THEIR SCHEDULED SAFETY SEMINAR DATE WERE CONTACTED AND RESCHEDULED. IF THE VIOLATOR CONSISTENTLY FAILED TO APPEAR, A JUVENILE WARNING TAG WAS SENT OUT.

---

*Source: Hastings Police Department, Summary. Hastings Bicycle-Pedestrian Safety Program, 1980.

CITY OF HASTINGS
Police Department
HASTINGS, MINNESOTA 55033

DARYL A PLATH
Chief of Police

Dear Parents:

This letter is to inform you that your child, ______________________, has been issued a Bicycle Violation Notice by Patrol Officer ______________, which requires him/her to attend Bicycle Safety Court at the following location and time:

Hastings Police Department
107 West 5th Street
Date: ________________
Time: ________________

Some cyclists, young and old, forget that their bicycle should be considered a vehicle and not a toy, that it is a precision machine and should be treated as such. Bicyclists are required to observe the same traffic laws and regulations as automobile drivers.

In the three years previous to the implementation of the Safety Program, there had been 35 pedestrian or bicycle accidents, resulting in 33 injuries and 2 fatalities, on the streets of Hastings. The first year of the program was very successful with only one injury and no fatalities, a drastic reduction over the previous years.

In the previous two years of the program, we discovered the root of many violations to be lack of parental knowledge on the subject of bicycle safety and/or disagreement with different aspects of the program. Therefore, we strongly recommend and encourage parents to attend the Bicycle Safety Court, to learn and voice your opinions about the program. Many of last year's suggestions were incorporated into this year's program.

The purpose of the Bicycle Safety Court is not to punish the child and it does not result in a juvenile record. The Bicycle Safety Court is a follow-up training session on bicycle safety for those children who demonstrate that they do not know how, or forgot how, to operate their bicycles safely on the city streets. However, a further violation will result in a petition of your child to juvenile court, which may result in a juvenile record. The police department reserves the right to waiver their right of petition under reasonable circumstances.

Sincerely yours,

Daryl A. Plath, Chief of Police
Hastings Police Department

JUVENILE DIVISION

Nicholas Wasylik
Police-School Liaison Officer

Kirk DiLorenzo
Safety Patrol Officer

Julie Goss
Safety Patrol Officer

CITY OF HASTINGS
Police Department
HASTINGS, MINNESOTA 55033

DARYL A. PLATH
Chief of Police

Dear______________________________,

Your child___________________had been scheduled to appear at Bicycle Safety Seminar on ________________________, and did not appear. We have tried to contact you in this matter but have been unable to do so.

Your child has been rescheduled for Bicycle Safety Seminar on ______________. Please make sure your child attends. Failure to do so will result in an appearence in Juvenile Court. If you have any questions or problems please contact us at the Hastings Police Department, 437-4126.

Thank-you for your cooperation,

Daryl A. Plath, Chief of Police
Hastings Police Department

JUVENILE DIVISION

Nicholas Wasylik
Police-School Liaison Officer

Julie Goss
Hastings Safety Patrol

Kirk DiLorenzo
Hastings Safety Patrol

ADJUDICATION

ATTACHMENT E

WISCONSIN BICYCLE SAFETY SCHOOL FOR VIOLATORS

BICYCLE SAFETY SCHOOL FOR VIOLATORS

A Supplement To The

MODEL PROGRAMS IN PEDESTRIAN & BICYCLE SAFETY FOR WISCONSIN COMMUNITIES

Prepared by Ronald L. Thompson
Pedestrian/Bicycle Safety Specialist
Wisconsin Governor's Office of Highway Safety
Don Gehrmann, Coordinator

March 1978

INTRODUCTION TO SPONSORS/INSTRUCTORS

The purpose of this school is to provide a means of counseling following the issuing of a bicycle violation notice or citation to either youth or adult offenders.

The objectives/goals of this school are to make certain that every bicycle driver attending the school will, upon completion:

1) have a better knowledge and understanding of motor vehicle laws relating to the operation of a bicycle;

2) have evaluated his/her driving habits through group discussion and/or instructor conference;

3) become a safer bicycle driver as a result of attendance.

The methods of instruction would include lecture, group discussion, audio/visual materials and individual counseling. Time for instruction would be 1 1/2hours to 2 hours in length. Sponsors would be police/sheriff departments or a regularly established safety organization. Instructors may be law enforcement personnel. However, it is suggested neutral instructors from a safety organization or a driver education instructor trained in decision making methods be used. It is best if classes be no larger than 30 with 15-20 recommended.

This same format may be used as a pedestrian school for violators if so desired.

RLT

COURSE OUTLINE

I. Introduction & Orientation (Agency/organization head or instructor) 10 minutes

   1. Explain why students (violators) have been assigned to the school

   2. Explain the purpose and goals of this school

   3. Have each student identify him/herself

II. Lecture (instructor) 15 minutes

   1. Review the basic rules of the road and basic good driving habits (see attached)

III. Bicycle Safety Film (15 minutes)

IV. Group Discussions (instructor and aides depending on size) 1/2 hour

   1. Break class into groups of between 5 and 8 students with an instructor's aide to serve as a facilitator for each group. Have each student identify the violation requiring his/her attendance.

   2. Ask questions from suggested list attached. Give each student a chance to respond stating his/her reply/feelings, etc. No one student should be allowed to dominate the discussion.

V. Optional: *Continuation of Group Discussions or individual counseling may be held at this time using instructor aides. (1/2 hour)

VI. Written Exam (15 minutes) (small groups)

   1. Give the written exam

   2. Correct the exam while still in groups

   3. Give students a chance to ask last-minute questions

VII. Read the "charge" to attendees (see attached note)

VIII. Dismiss

* NOTE: Another option during this time period would be to administer a skill test to drivers or request that each violator write an essay centered around the violation. Discussion questions on page 3 may be used for the essay.

DISCUSSION GROUP GUIDELINES

Instructors, please note:

The following discussion group activities sections are set up in a decision making format. You will be asking various questions and making statements that will be making the student evaluate his/her attitudes, choose from various alternatives and make a statement affirming his/her feelings. There are no "right" or "wrong" answers. However, by listening to the answers given, you might be able to determine hidden attitudes and try to get the student to evaluate them in more depth.

The activities sections include:

1. Decision making questions
2. Role playing
3. Devil's advocate
4. Open-ended questions

Although each section can be used individually, the instructor may want to use a combination from each. An asterisk is placed in front of those suggested for use in a combination approach.

DISCUSSION QUESTIONS

Ask the following questions of the students. Several questions can be asked of one student before moving onto the next or each question asked of each member of the group and then move on to another.

1. Explain in your own words what the law was that was violated. Did you consider the consequences before you violated?

* 2. Do you think laws are important? Why or why not?

* 3. How do laws affect your safety when you obey them? When you disregard them?

* 4. How does the law affect other road users safety when you obey it? When you disregard it? Should we be able to do just what he/she wants to do?

5. How do your parents feel about your violating this law? Are you glad they feel this way? Why?

6. How do your friends feel about violating this law? What are their reasons for feeling that way?

* 7. How do you feel about violating this law? Do you violate often? Why?

8. What kinds of things are being done to enhance your safety by 1)police, 2)schools, 3) organizations, etc.

9. How do these activities help your safety while you are driving your bike?

10. What kinds of things can you do to make your bicycle driving safer?

Role Playing

Act out one or two of the more common violations with the students playing the roles of the violators, police, parent, friend and judge. Bring players into the act at times they would normally appear. In some cases a reversal of roles may be done whereby the officer becomes the violator and violator the officer, etc.

Devil's Advocate

Play the devil's advocate by making some opening statements such as: There should be no laws to govern bicycles in traffic, bicyclists should be allowed to break laws, it is not necessary for bicyclists to learn good bicycling habits, police officers should ignore all bicycle violations, it's up to motor vehicle operators to watch out for bicyclists, bicycles should be considered toys, etc.

(The devil's advocate role allows participants to more clearly understand both sides of the situation and probably swing more positively to the "good side".)

Open-ended Questions

The following questions will make students think about what they would do and in so doing, they will be learning decision-making as well as evaluating and considering alternatives. Keep responses relative to bike safety.

1. If I had a new bicycle, I would ...
* 2. If I had $10 to spend on my bike, I would ..
3. At the next intersection!
4. While driving a bike at night..
* 5. While driving a bicycle with friends ...
* 6. If a police officer stops me ...
7. I like bicycling because...
8. If I could make any change I would...
* 9. My advice to other bicycle drivers is...
10. I've made up my mind to...

Bibliography:

1. Hutter, I. Russell & Jerome W. Witherill, Teaching For Self Awareness and Group Interaction, Wisconsin Department of Public Instruction, 1977.

2. Hutter, I. Russell & Joseph J. Pease, Wisconsin Drive & Traffic Safety Education Teacher Preparation Guide, Wisconsin Department of Public Instruction, 1977.

3. Raths, Louis E., et al, Values & Teaching, Columbus, Ohio, 1966.

4. Bicycle Law Sheet #4, Gov. Office of Highway Safety.

BICYCLE DRIVER TEST

Multiple Choice--Circle the best answer.

1. A bicycle driver should stop at a stop sign or signal:

   A. Only when there are motor vehicles approaching
   B. Never--bicycles are not required to stop
   C. At all points where stop signs or red signals are present
   D. Only when you feel like it.

2. It is legal to hitch a ride on a motor vehicle:

   A. Never--it is against the law
   B. When the motor vehicle driver says it's okay
   C. When there is little or no traffic
   D. When the motor vehicle driver isn't aware of it.

3. You should give audible warning:

   A. Whenever an emergency exists
   B. Whenever overtaking a pedestrian
   C. Whenever passing another vehicle
   D. All of the above

4. After dark a bicycle driver should:

   A. Wear white
   B. Wear dark clothes
   C. Have a light and reflector on the bicycle
   D. A & C of the above

5. It is legal to ride a bicycle at night if you have:

   A. No light but a reflector to the rear
   B. A white light to front and red reflector to rear
   C. A white light only
   D. A white reflector to front and yellow reflectors to the side only

6. Bicycles should be driven:

   A. Down the center line
   B. As close to the left hand edge of the road as practicable against traffic
   C. As close to the right hand edge of the pavement as practicable with traffic.
   D. Just to the left of the center line

7. The hand signal for a right turn is:

   A. Left arm out and bent up at the elbow
   B. Right arm out straight
   C. Left arm out and bent down at the elbow
   D. A & B of the above

8. The hand signal should be given:

A. Immediately prior to turning
B. About 50 feet before turning
C. One block before turning
D. Only when traffic is present

9. Bicycle drivers communicate with other drivers:

A. With lights
B. With horns or bells
C. With hand signals
D. All of the above

10. Safety equipment required on a bicycle should include:

A. Chain guard, brakes, light, helmet
B. Helmet, chain guard, fenders, reflector
C. Brakes, light, reflector and warning device
D. Helmet, warning device, lights, brakes

True or False: If the statement is true, circle the T, if the statement is false, circle the F.

T F 11. It is safe to ride three abreast when riding in a group.

T F 12. It is safe to pull a wagon behind your bicycle if the rope is strong.

T F 13. It is against the law to ride a bicycle on a freeway.

T F 14. A bicycle license is required in our city.

T F 15. A yellow or blue reflector can be used as a rear reflector.

Answers

1. C
2. A
3. D
4. D
5. B

6. C
7. A
8. B
9. D
10. C

11. F
12. F
13. T
14. T
15. F

BICYCLE DRIVER CHARGE

Each of you when driving a bicycle are actually operating a vehicle. A driver of a vehicle upon any roadway has the same rights and responsibilities as any motor vehicle operator and must conform to the same regulations as cars, trucks, buses and motorcycles. Participating in traffic while using a bicycle is hazardous but through knowing and understanding the laws pertaining to bicycle operation, by driving defensively and by obeying the laws, the degree of hazard is reduced. Remember, you are sharing the road with many other road users and by driving in a safe and predictable manner, the job of sharing the road will be much easier for all.

SUGGESTED FILMS

The following films are available on a free loan basis from the Governor's Office of Highway Safety.

* Bicycles Are Beautiful 25 min. Color 1974 - PIJSA
Bicycle Built for You 20 min. Color A
Bicycle Drivers Don't Have to Have Accidents 14 min. Color IJSA
* Bicycling on the Safe Side 12 min. Color IJSA
Bicycle Riding Reminders 11 min. Color 1970 PIJ
Bicycle Rules of the Road 11 min. Color 1965 PIJS
* Bike Driver Mike 17 min. Color 1975 IJS
Day the Bicycles Disappeared 15 min. Color 1967 JIJ
* Just Like a Car 12 min. Color IJ
One Got Fat 15 min. Color 1963 PIJ
* Only One Road 25 min. Color 1975 JSA
Ride On By (Bicycle enforcement) 12 min. Color A
* Tripping on Two 25 min. Color 1976 JSA

* Recommended films for Violators Schools

"RULES TO LIVE BY"

1. BICYCLES ARE NOT ALLOWED ON EXPRESSWAYS AND FREEWAYS.
2. MAKE TURNS FROM PROPER ROAD POSITION.
3. USE HAND SIGNALS.
4. ONLY ONE ON A BIKE UNLESS DESIGNED OR EQUIPPED FOR MORE.
5. KEEP AT LEAST ONE HAND ON HANDLEBARS.
6. NEVER ATTACH BICYCLE OR YOURSELF TO ANOTHER VEHICLE.
7. DRIVE AS CLOSE AS PRACTICABLE TO RIGHT EDGE OF ROADWAY.
8. ALWAYS DRIVE WITH TRAFFIC FLOW.
9. ALWAYS DRIVE IN SINGLE FILE.
10. YIELD RIGHT-OF-WAY IF IMPEDING TRAFFIC.
11. YIELD TO PEDESTRIANS ON SIDEWALK OR IN CROSSWALKS.
12. USE LIGHT & REFLECTOR IF DRIVING AT NIGHT.
13. KEEP BICYCLE IN GOOD WORKING ORDER.

"ALWAYS DRIVE A SAFE BICYCLE SAFELY"

Wisconsin
wants you to live

STATE OF WISCONSIN

GOVERNOR'S OFFICE OF HIGHWAY SAFETY

Suite 803, James Wilson Plaza
131 West Wilson Street
Madison, WI 53702

ADJUDICATION

ATTACHMENT F

DALLAS PEER COURT

THE JUVENILE TRAFFIC COURT

of

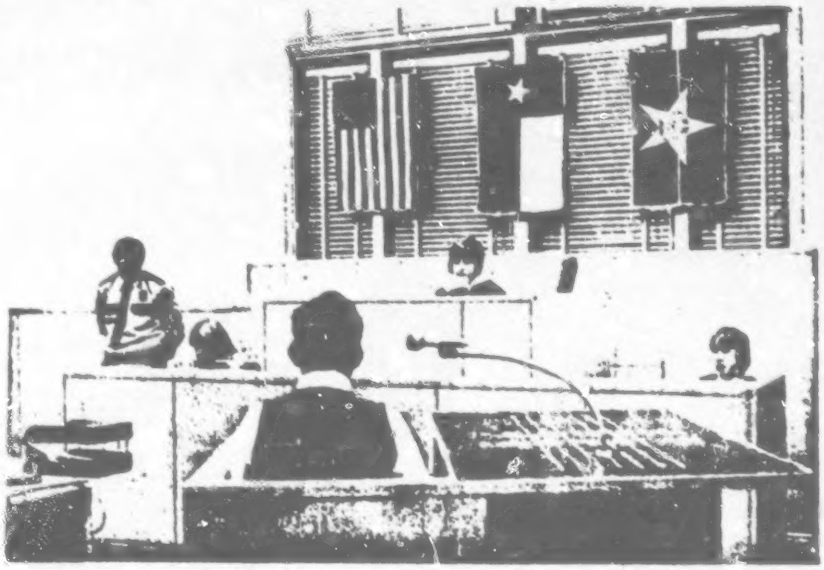
Dallas

The present Juvenile Traffic Court of the City of Dallas is an outgrowth of the Bicycle Traffic Court which was organized in March of 1942. This Court handles not only bicycle, but all pedestrian traffic violations committed by boys and girls between the ages of 12 and 16; and motor traffic violations of boys and girls 13 years of age and under.

The Juvenile Traffic Court is a means of handling juvenile traffic violations in a simple, yet effective manner. The Court is operated entirely by teen-age boys and girls. It affords an excellent means of acquainting youth with problems of traffic violation enforcements. It also develops leadership and acquaints those who serve on the Court, as well as the violator, with the various aspects of traffic safety and the criminal justice system. It appeals to the youth because young people like to take an active interest in what is going on around them. Also, the violator is tried by his peers to whom he feels more comfortable in expressing himself.

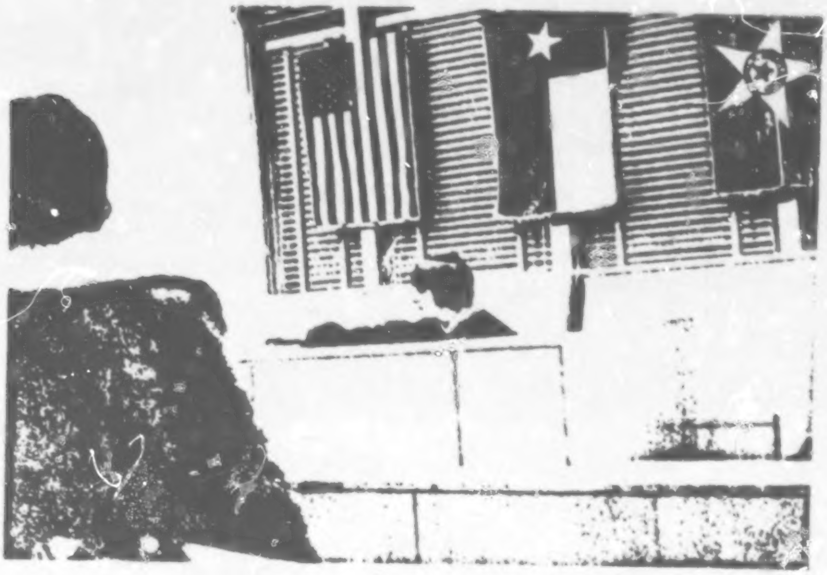
The Court is under the direction of the Office of Traffic Safety. The Court's staff consists of a Supervisor, a Youth Action Officer, and six to eight young representatives from each of the Police Explorer Posts and Safety Clubs. Violators are encouraged to return to Court and take an active role as ushers or helpers.

It is the duly accepted obligation of each appointed student to be prompt and regular in attendance and to conduct himself or herself with seriousness of purpose and fairness of action as to reflect dignity upon the Court.



BEST COPY AVAILABLE

Citations to appear before the Court are issued only by the Police Department. If the juvenile has been charged with a motor violation the child with the parent is asked to talk with the A. P. B. Officer before leaving.



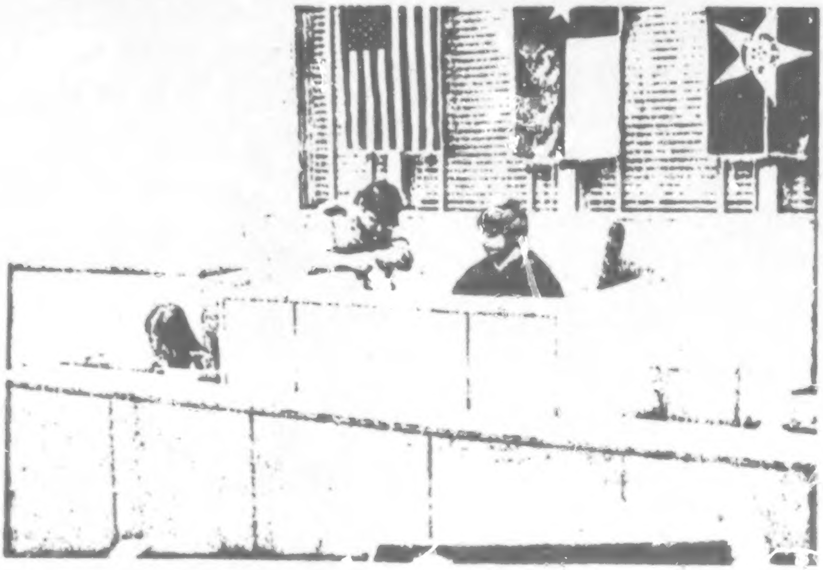
BEST COPY AVAILABLE

OFFICIALS OF THE COURT AND THEIR DUTIES

The seven offices of the Court are: Judge, Prosecuting Attorney, Clerk, Associate Clerk, Bailiff and two Associate Bailiffs.

DUTIES OF THE JUDGE

The Judge opens the Court by rising, using the gavel once and stating: " Let there be order in the Court...the Dallas Juvenile Traffic Court is now in session." Everyone in attendance is requested to rise and take the Pledge of Allegiance. After everyone is reseated the Judge asks the violators to come forward as directed by the clerk. The defendant is always asked for his plea... Guilty or Not Guilty or No Contest. As deemed appropriate, the Judge may counsel the defendant upon the necessity for observing the law and traffic rules. After hearing all evidence the decision should be rendered and sentence passed without delay. The Judge has the authority to ask anyone in attendance to leave the Courtroom if he or she is interfering with Court Proceedings. If the person should refuse, the Judge may request the bailiff to summon an officer.



BEST COPY AVAILABLE

DUTIES OF THE PROSECUTING ATTORNEY

The Prosecuting Attorney requests the defendant to take the witness stand. He then states the defendant's name and the charge. After handing the Judge the ticket and/or A. P. P. sheet he returns to his chair.

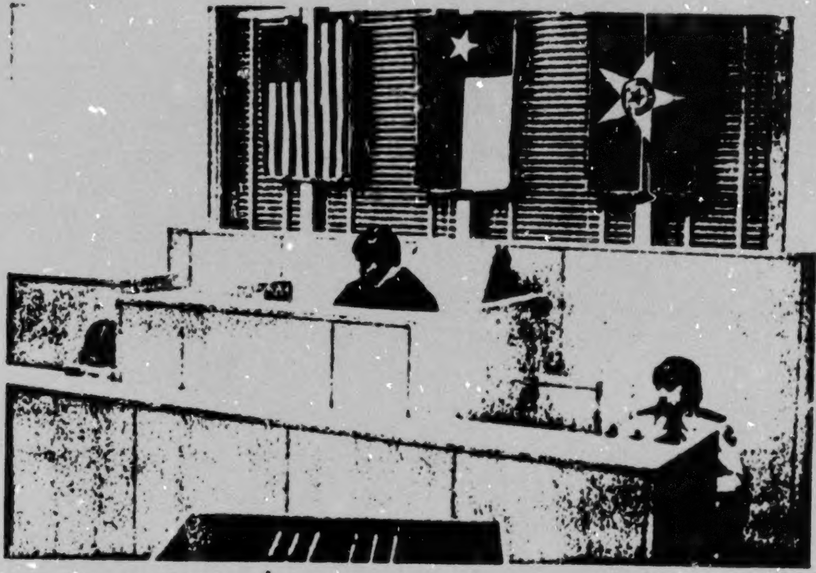
DUTIES OF THE CLERKS AND ASSOCIATES

The Clerks and Associates collect the traffic ticket from the defendant as he comes forward. The Associates prepare a duplicate ticket if the defendant does not have his copy. The Clerk is responsible for the accuracy of the docket with regard to checking each name of each defendant present. He is responsible for attaching the ticket to the referral sheets which have previously been posted on the docket. The tickets are kept in sequence for the Prosecutor. The Associates seat the defendants and their parents in the proper places in the Court Room. The Associates also stand by the door to direct late comers.

BEST COPY AVAILABLE

DUTIES OF THE BAILIFFS

The Bailiffs shall carry out all orders of the Judge. When the defendant leaves the stand, the Bailiff shall see that the defendant gives his correct name and the school he attends. He shall see that those defendants held for referral are directed to the proper person. One Associate Bailiff shall occupy the table with the Bailiff in order to record the names of the school and number in Court from each school. The other Associate Bailiff will see that the defendant, sentenced by the Judge to write a theme, gets the proper literature and materials to write the theme. When Court is adjourned, the Bailiffs straighten the Court room.



BEST COPY AVAILABLE

The attitude of the defendant plays a major part in the type of penalty assessed. A disrespectful attitude on the part of any defendant justifies being referred to the counsellor.

For the first violation the defendant whose violations involve bicycle and pedestrian offenses, are released with a warning and given traffic safety literature and a theme.

For the second violation the defendant may be referred to a counsellor in the Accident Prevention Bureau of the Dallas Police Department or counsellors from other agencies that are recommended by the adult supervisor of the Juvenile Traffic Court. The parent is notified by mail to appear in Court with the juvenile at the time of trial.

In all motor vehicle cases, the defendants are referred to a counsellor in the Accident Prevention Bureau with his parent or guardian. The parent or guardian is notified by letter to appear in Court with the juvenile at the time of trial.

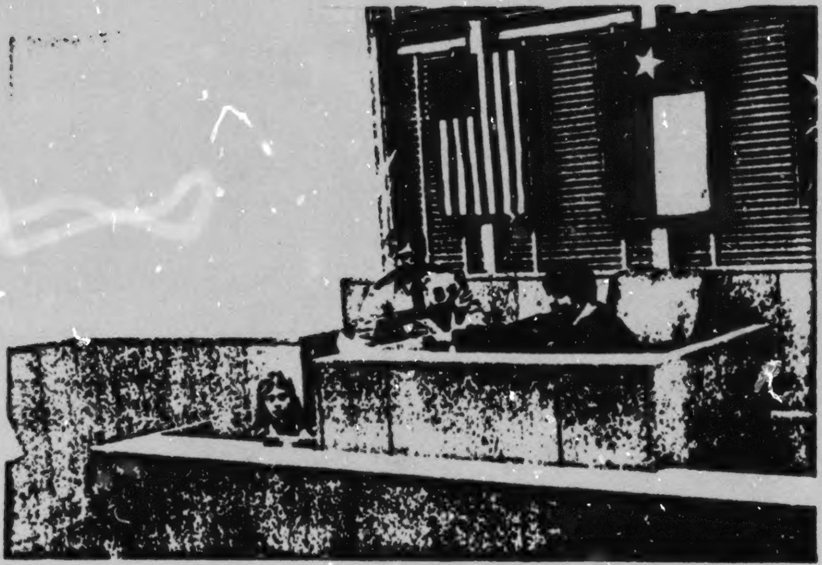
In cases of repeated violations in NO OPERATOR'S LICENSE cases, charges may be filed against the adult parent or guardian.

In repeated cases, where the Juvenile Court records show that the juvenile and his parent or guardian have had repeated warnings, and where the adult does not extend his full cooperation, qualified counsellors review the juvenile's case.

The Court functions primarily as an education and referral program. It uses other organizations and agencies to further education and assistance.

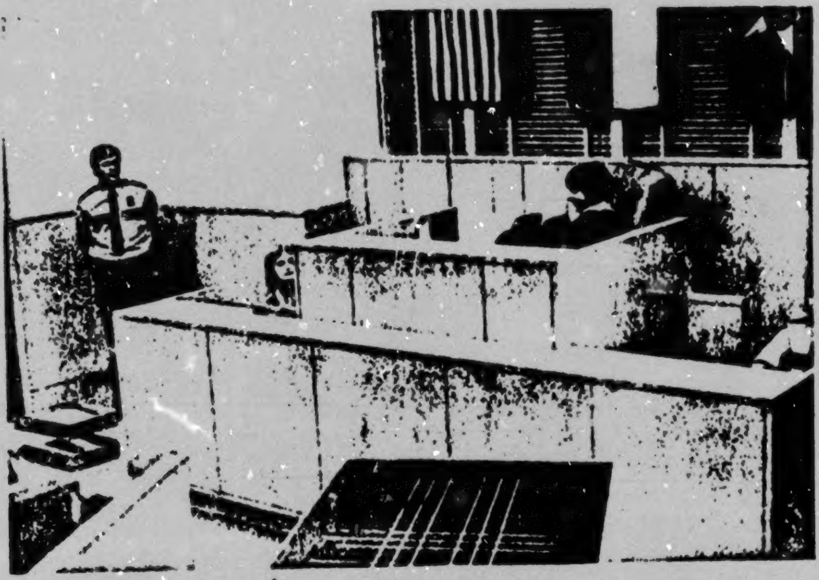
BEST COPY AVAILABLE

The Court is a rewarding experience for everyone who participates.



BEST COPY AVAILABLE

There are some lighter moments to the Court. Some of the reasons violators give for receiving a ticket are just too humorus not to laugh at. This relieves some of the tension and,since for some this can be a frightening experience, relaxes the defendants.



BEST COPY AVAILABLE

ADJUDICATION

ATTACHMENT G

CONCORD PEER COURT

THE CONCORD BICYCLE TRAFFIC COURT

In 1959, the City of Concord had a population of 33,200 with a total school enrollment of 13,575. With an ever increasing number of bicycles being operated on the city streets resulting in increased traffic violations by bicycle riders and accidents involving bicycles, it became evident to the Police Department that something had to be done to meet this emerging threat to the young people in the community.

As a combined educational and enforcement program, the Concord City Council adopted a City Ordinance controlling the operation of bicycles within the city and the Police Department's Juvenile Bureau established a bicycle court with the approval of the Contra Costa County Juvenile Authorities. Bicycle Court Summons forms, notices to parents and other form letters and related written material were prepared. It was determined that bicycle riders under the age of 18 would be cited into the bicycle court and that those 18 and over would be cited into the adult traffic court.

The majority of all traffic accidents involving bicycles are usually the fault of the bicyclist with the major single cause, or violation by the bicyclist, that of riding on the wrong side of the street against the oncoming vehicles. All too often it has been found that well meaning parents have been at fault in giving their youngsters either wrong or misunderstood information regarding the laws governing the safe operation of bicycles when riding on the streets.

The Concord Bicycle Traffic Court was first organized with student body officers selected from the local intermediate schools to serve as Justices and a Juvenile Officer was assigned by the Police Department as Court Advisor. The boys and girls selected were chosen for their scholarship and maturity. The student members were sworn into the office of Bicycle Court Justice by the then Concord-Pleasant Hill Municipal Court Judge. Before long, the bicycle court was in full swing, hearing several cases each month. Court convened on Saturday mornings with the student judges hearing anywhere from two to fifteen cases.

Starting out on their first court day as Bailiff, the student next stepped up to the position of Second Associate Justice on the following court day, then to First Associate Justice and finally to Chief Justice and head of the court for that day. After serving as Chief Justice, the student member awaited his or her turn to rotate through the positions again.

BEST COPY AVAILABLE

In 1967, the responsibility for the operation and supervision of the bicycle court was turned over to the Traffic Bureau of the Police Department's Uniform Division. The court had changed only in that the student judges were now being selected solely from the local high schools. By 1968, the bicycle court, under the supervision of the police officer in charge of the Traffic Bureau's bicycle detail, was a firmly established and sophisticated bicycle safety program.

Today, the court structure and the selection of older high school students for Justices remain the same, except for the Bailiff. The duties of the Bailiff are assumed by a uniformed member of the Concord Police Explorer Post, a senior Boy Scout group sponsored by the Concord Police Officers' Association. There are normally sufficient student judges available during the school vacation period to permit continuous operation throughout the summer months.

Of the many cases handled by the bicycle court each year, the rate of recidivism is less than 3%. A study of the trend in bicycle violations assists the bicycle detail in their planning of bicycle safety programs in the schools.

At the end of each court year in the month of December an annual End-of-Year Luncheon, hosted by the Police Department, is given for the student judges. Other than the self-satisfaction of doing an important community service, this is the only form of compensation they receive. Local dignitaries are invited to attend and give recognition to the student judges and include the Municipal Court Judge, the Mayor, the Chief of Police, and other members of the Police Department connected with the program. The Concord Bicycle Traffic Court has proven itself to be a highly beneficial and educational program in bicycle safety and in introducing the young defendants and Justices alike to the judicial process.

BEST COPY AVAILABLE

ORGANIZATION AND FUNCTIONING OF THE CONCORD BICYCLE COURT

A. Personnel

The judges of the Bicycle Traffic Court are selected from the high schools in the City by faculty and student body representatives at each of the schools concerned. The students are selected from the schools based upon scholastic ability and leadership and serve for a period of one calendar year. It has been customary, however, to retain several of the judges from one year to the next providing the nucleus of experienced personnel about which to build each subsequent court.

B. Method of Operation

Three students take part in each court session. One serves as Chief Justice, two as Associate Justices. Members of the Concord Police Explorer Post, sponsored by the Concord Police Officer's Association, serve as Bailiff. The Bicycle Detail officer, or the Police Cadet assigned to the Bicycle Detail is also present at each session as adult counsellor. At the beginning of the year a schedule is developed whereby each court session includes three judges. Each member of the court sits in at least three sessions and serves as Second Associate Justice, First Associate Justice, and Chief Justice. The position of Chief Justice changes each Saturday. The Bicycle Court convenes at 10:30 a.m. on a Saturday morning in the Municipal Court Room located in the Civic Center. It is important that this activity be continued throughout the summer months and normally there are sufficient judges available on any given Saturday during the vacation period to permit continuous operation. All that is required is the development of a summer schedule by the officer in charge prior to the end of the spring semester.

Before taking office at the beginning of the court year, an oath of office is administered to the Bicycle Court judges by a judge of the Mt. Diablo Municipal Court, following which they attend a session of Bicycle Court as an observer. Prior to their first session as judges, they are given an orientation course whereby they become acquainted with the various forms and instruction sheets to assist them in handling the cases which they will hear.

At the time of issuance of a Bicycle Court summons to a juvenile offender, a copy of the summons is forwarded to the Bicycle Detail by the issuing officer. From the summons, individual complaints are made and a court calendar is established.

Subsequent to the issuance of a Bicycle Court summons to a juvenile offender, a letter is sent to his parents informing them of his appearance in Bicycle Court. The letter explains the violation, the date for the required appearance in court, and outlines the objectives of the court. Stress is placed upon the fact that it is educational, not criminal. After his appearance in court, a notice is sent to the parents informing them of the instructions of the court.

At the opening of a court session, the Chief Justice calls the court to order and addresses the defendants as follows:

"Before hearing today's cases, I would like to inform all in attendance that this court was organized by the Concord Police Department, under the guidance

BEST COPY AVAILABLE

of the Mt. Diablo Municipal Court and with the blessing of the Contra Costa County Juvenile Authorities. The purpose of this court is to impress upon bicycle riders that they are responsible for the proper operation of their bicycles, the same as motorists are with their automobiles. We hope that our decisions here today will help those who appear before us to become safer bicycle riders and, therefore, add to the safety of the residents of Concord. The instructions of this court must be carried out and cleared with the officers of the Concord Police Bicycle Detail by next Friday. Essays and other written assignments must be handwritten in ink and on lined paper. Failure to obey the instructions of this court may mean either an added sentence or referral to the Juvenile Traffic Court. The Bicycle Court is an educational program and that all may benefit from the proceedings, you must remain until court is adjourned."

The Bicycle Detail officer then addresses the violators appearing before the court and their parents in attendance with the following statement:

"Good morning, This court is not a formal court of law. Your Bicycle Court judges are high school students selected on recommendation by their schools. They are sworn into the office and instructed in basic court procedures by Mt. Diablo Municipal Court Judge Wroy Renaghan. Violations of the rules of the road are normally heard in Traffic Court. If this court were not available to young riders who erred in traffic safety, they, too, would be required to appear in Traffic Court. Should anyone present desire a formal judicial process, please inform the Bailiff when your name is called. The officer issuing your Bicycle Court summons will be directed to issue a formal traffic citation which will be processed by the legal desk and forwarded to the Juvenile Traffic Court. Your appearance date will be set by the Juvenile Traffic Court and will be mailed to you and your parents by that court. One word of caution....Failure to comply with the instructions of this court may result in the case being transferred to Traffic Court for formal disposition."

Following the opening statements, the bailiff is instructed to call the first case from the court calendar. Each defendant is called before the judge and takes the following oath, (to avoid possible criticism, defendants are not required to raise their right hands nor swear in taking the oath): "________, you have been called before this court on a serious matter. Do you promise to answer all questions truthfully?" After the oath is administered, the bailiff reads the complaint and passes the complaint form to the Chief Justice who then asks the defendant whether or not he committed the offense charged. The Chief Justice then conducts the interrogation of the defendant and may be assisted by the Associate Justices.

C. Disposition

Upon determination by the court of the guilt of any defendant, disposition may be as follows:

1. Obtain a bicycle license within 15 days.

2. Have a Concord Police Officer check your bicycle equipment and return your copy of the citation, or some other proof of correction, signed by the officer, to the Police Department by next Friday.

3. Have your parents deprive you of the use of any bicycle for ________ days.

BEST COPY AVAILABLE

4. Copy Section_________of the Concord Bicycle Ordinance_________times and return it to the Police Department by next Friday.

5. Write a composition of not less than_________words on the subject,
"____."
and return it to the Police Department by next Friday.

6. Verbal reprimand.

In the event a violator fails to appear as directed, or to carry out the instructions of the court, the Bicycle Detail officer calls the violator, accompanied by a parent, to his office to determine the reason for the failure to comply. If this interview fails to obtain the necessary results, the case is referred to the Juvenile Traffic Court, via the standard traffic citation, for disposition.

EST COPY AVAILABLE

BICYCLE COURT FORMS

The previous pages explain briefly as to the function and organization of the Concord Bicycle Court. A variety of forms and procedures have been generated for this safety program and to assist in setting up a similar program. The following will be an explanation of the forms that are presently being used by the Concord Bicycle Court:

As indicated in Paragraph A, the Court Judges are selected from the various high schools within the city limits through the assistance of the Student Activities Advisors. The students selected are requested to file an application form (Appendix A). Upon receipt of the completed form, the student is record checked for any criminal record or activities that would disqualify him to sit in judgment of his fellow students. If the student is determined to have the appropriate qualifications for the position of Bicycle Court Judge, his name is entered on a roster and he is later notified to attend the swearing-in ceremony. Arrangements are made, through the Municipal Court, to have a judge swear in the students that will be acting as judges in the Bicycle Traffic Court.

Each judge is given a form setting forth their duties and responsibilities (Appendix B). This form gives the judges outlines as to their line of questioning youthful traffic offenders in determining the facts surrounding each case. The form lists the possible dispositions, upon hearing the case before them, which will best benefit the violator.

The Patrol Bureau officers are supplied with Bicycle Court Summons (Appendix C). When an officer observes a violation committed by a young bicyclist in the city, a Bicycle Court Summons is prepared with the violator signing same, promising that he will appear when directed. The appearance date is not set by the citing officer. The violating juvenile receives the original copy. The second copy is forwarded to the Bicycle Detail.

Upon receipt of the bicycle summons by the Bicycle Detail, three forms are prepared. The citation is recorded on a continuing log (Appendix D). Two additional forms are completed (Appendix E and F) for Bicycle Court use.

A procedure is set up whereby no child under the age of ten must appear before the Bicycle Traffic Court. Also, if young bicyclists have only violated the provision requiring licenses for bicycles, these youngsters are also excluded from Bicycle Traffic Court. Their parents are sent a form letter (Appendix G)explaining the requirements of a bicycle license. This form letter is accompanied by a copy of the Concord Municipal Ordinances on bicycles (Appendix O).

If the youngster has violated some other provision of the Bicycle Safety Laws, ordinances or requirements, a form letter (Appendix H) is forwarded to the violator's parents explaining the violation and setting the Court appearance date. It will be noted that in this form letter a request is made of the parents to assist in our attempt to prevent accidents.

BEST COPY AVAILABLE

Bicycle Traffic Court is not a criminal proceedings and not a court of record. It is an educational experience. The bicycle Traffic Court is carried on in the Municipal Court chambers and the personnel involved in the hearing are three Judges, consisting of the Chief Justice, the First Associate Justice and the Second Associate Justice. A member of the Concord Police Explorer Post, sponsored by the Concord Police Officers' Association, serves as Bailiff.

When court is to convene the Bailiff, Chief Justice, and the Associate Justices enter the courtroom. The Bailiff calls, "All rise please" and the Justices take their respective seats. The Bailiff then says, "Be seated" and the Chief Justice begins court with the opening statement. (The Chief Justice is supplied with a folder with information explaining his duties and responsibilities and the opening statement to be made.) (Appendix K) The Chief Justice opens the Court proceedings by reading aloud the opening statement. (The First Associate Justice and the Second Associate Justice have similar folders with information explaining their duties.) (Appendix L and Appendix M) When the hearings are to begin, the Chief Justice instructs the Bailiff, "Bailiff, call the first case."

To expedite the Court proceedings, roll is called by the Bailiff to determine those persons that have not appeared. (Absentees are referred back to the Bicycle Detail for follow-up contact at a later date.) The violators are directed to be seated at the front of the courtroom.

The Bailiff also has a folder containing all of the Court cases and he has his instructions stapled inside his folder. (Appendix N)

It should be noted that the Chief Justice is in charge of all proceedings. The Chief Justice is assisted by the First and Second Justices.

At the conclusion of the Court hearings, all of the paper work involved is returned to the Bicycle Detail where follow-up letters are sent to those parents whose children appeared before the Bicycle Court. The lower part of form F in the Appendix is sent to the parents to instruct them as to the outcome of the Bicycle Court and what disposition was reached for their youngster.

The disposition(s) must be completed or fulfilled by the following Friday. In the event a violator has failed to appear when instructed to do so, a Failure to Appear Notice is mailed to the parents, alerting them to the fact that their child failed to appear. In some instances the youngster was sent to the Court by the parents, but merely failed to show up.

In the event a youngster who appeared in Court fails to comply with the order of the Chief Justice in fulfilling the disposition, a form letter (Appendix I) indicating the failure to comply with the Court's orders is mailed to the parents.

Pamphlets (Appendix O, P, Q, R and S) are given to each violator at the time the Bicycle Court is held. They are also made available at the time of bicycle licensing. (They are included merely as samples of what we make available to the bicycling public.)

BEST COPY AVAILABLE

CONCORD POLICE BICYCLE DETAIL

Concord Bicycle Traffic Court

Instructions to Bicycle Traffic Court Justices

As Justice of the Bicycle Traffic Court, you will make a valuable contribution to the welfare of your city. You will be charged with the judging of your peers, friends, and classmates. This is a serious responsibility and demands your best efforts. Remember, you must be fair and impartial at all times. Your judgement must be based entirely upon the facts concerning any given case and personal friendships or loyalties must not be permitted to affect your decisions. The coming session of the Bicycle Court will offer you a wonderful opportunity to further the case of traffic safety.

The following suggestions are designed to assist you. Study them carefully and you will find that they will aid you in arriving at proper decisions.

1. Follow the instructions on the complaint form which is prepared for each case.
2. Ask your questions in a clear and distinct manner and wait for complete answers.
3. Make sure that the violator understands your questions. If the answers are not satisfactory, restate your question until a proper answer is received.
4. Before arriving at a decision, be sure to obtain all of the facts.

WHAT HAPPENED?
WHERE DID IT HAPPEN?
WHEN DID IT HAPPEN?
HOW DID IT HAPPEN?
WHY DID IT HAPPEN?

5. Remember that the disposition should fit the offense. In arriving at a decision, you should consider:

    a. The seriousness of the violation.
    b. The location of the violation (business or residential area, heavy or light traffic).
    c. The age of the violator and his year in school.
    d. The number of violations for which he has received a summons in the past. (This information will be furnished to you by the Bicycle Detail; you should also try to determine it during your questioning of the violator.)
    e. Does he have a job that requires a bicycle?
    f. Remember that all dispositions must be consistent and that you should be able to justify them. (For example, it would be an error to give a 16-year-old violator a lighter penalty than an 11-year-old violator for the same offense.)

Concord Police Bicycle Detail

APPENDIX B

INSTRUCTIONS TO THE CHIEF JUSTICE

As Chief Justice, you will sit with the First Associate Justice to your right and the Second Associate Justice to your left. You will question the defendant and try to ascertain what he/she did and try to impress upon them what they did wrong. You may confer with the other judges as to what disposition, if any, shall be given. Give the other judges an opportunity to also ask the defendant any questions they may have. You shall write on the case form the disposition YOU have decided upon. At this time you will advise the defendant of the disposition. It is your duty to keep order in the courtroom. REMEMBER, YOU ARE THE HEAD OF THE COURT.

OPEN COURT BY READING THE FOLLOWING

"BEFORE HEARING TODAY'S CASES, I WOULD LIKE TO INFORM ALL IN ATTENDANCE THAT THIS COURT WAS ORGANIZED BY THE CONCORD POLICE DEPARTMENT, UNDER THE GUIDANCE OF THE MT. DIABLO MUNICIPAL COURT AND WITH THE BLESSING OF THE CONTRA COSTA COUNTY JUVENILE AUTHORITIES. THE PURPOSE OF THIS COURT IS TO IMPRESS UPON BICYCLE RIDERS THAT THEY ARE RESPONSIBLE FOR THE PROPER OPERATION OF THEIR BICYCLES, THE SAME AS MOTORISTS ARE WITH THEIR AUTOMOBILES. WE HOPE THAT OUR DECISIONS HERE TODAY WILL HELP THOSE WHO APPEAR BEFORE US TO BECOME SAFER BICYCLE RIDERS AND THEREFORE ADD TO THE SAFETY OF THE RESIDENTS OF CONCORD. THE INSTRUCTIONS OF THIS COURT MUST BE CARRIED OUT AND CLEARED WITH OFFICERS OF THE CONCORD POLICE BICYCLE DETAIL, BY NEXT FRIDAY. ESSAYS AND OTHER WRITTEN ASSIGNMENTS MUST BE HANDWRITTEN IN INK AND ON LINED PAPER. FAILURE TO OBEY THE INSTRUCTIONS OF THIS COURT MAY MEAN EITHER AN ADDED SENTENCE OR REFERRAL TO THE JUVENILE TRAFFIC COURT. THE BICYCLE COURT IS AN EDUCATIONAL PROGRAM AND THAT ALL MAY BENEFIT FROM THE PROCEEDINGS, YOU MUST REMAIN UNTIL COURT IS ADJOURNED."

"Officer_____________, please inform those appearing before this Court, and their parents, of the alternative proceedings available to them."

"Bailiff, call the first case."

After all cases have been heard: "Are there any other matters to be brought before this Court?"

If nothing further, "Court is adjourned."

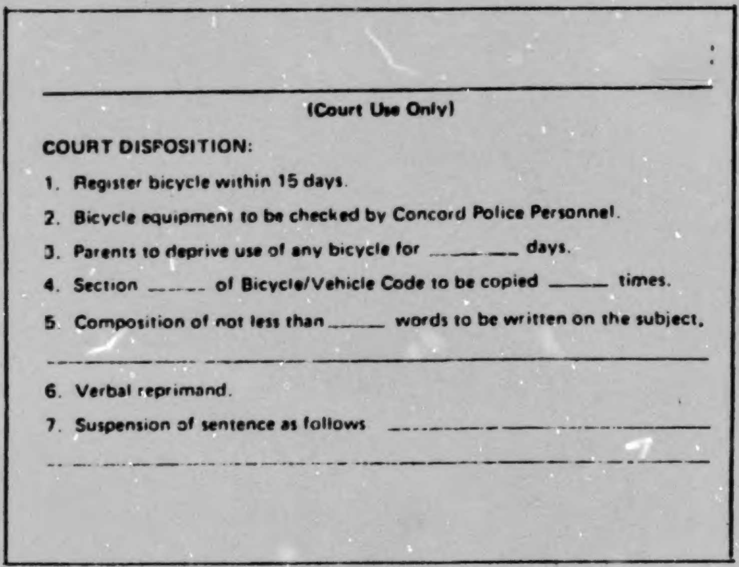
APPENDIX K

BEST COPY AVAILABLE

INSTRUCTIONS TO THE FIRST ASSOCIATE JUSTICE

You will sit to the right of the Chief Justice and will assist as much as possible. You will take the papers from the Bailiff after he has read the charges. You will keep the summons and pass the other two papers to the Chief Justice.

You, along with the Second Associate Justice, may assist the Chief Justice in questioning the defendant and deciding the disposition; however, the Chief Justice has the final say. If a disposition is imposed, you will write the disposition on the appropriate space provided on the summons.



(Court Use Only)

COURT DISPOSITION:

1. Register bicycle within 15 days.
2. Bicycle equipment to be checked by Concord Police Personnel.
3. Parents to deprive use of any bicycle for ________ days.
4. Section ______ of Bicycle/Vehicle Code to be copied ______ times.
5. Composition of not less than ______ words to be written on the subject. ________________________
6. Verbal reprimand.
7. Suspension of sentence as follows ________________________

BEST COPY AVAILABLE

APPENDIX L

INSTRUCTIONS TO THE SECOND ASSOCIATE JUSTICE

You will sit to the left of the Chief Justice and will assist as much as possible. After the Bailiff has read the charges to the defendant, he will pass the papers to the First Associate Justice. The Chief Justice will pass the Court Instructions paper to you. You will write today's date in the proper place provided on the form. You, along with the First Associate Justice, may assist the Chief Justice in questioning the defendant and deciding the disposition; however, the Chief Justice has the final say. If a disposition is imposed, you will indicate the disposition by circling the number on the instruction form and complete the appropriate spaces.

On completion of the instructions form, you will return it to the Bailiff who will give it to the defendant.

INSTRUCTIONS

The following instructions, issued to ____________ on ________ must be carried out as directed. Failure to comply will necessitate referral of the case to the Juvenile Traffic Court. Telephone inquiries may be made to 682-4100, ext. 298. Correspondence should be directed to the Bicycle Detail, Concord Police Department, 1900 Parkside Drive, Concord, California.

1. Obtain a bicycle license within 15 days. (Bicycles may be licensed at the Concord Police Bicycle License Office, 1900 Parkside Drive, between 3:00 P.M. and 5:00 P.M. on Friday, and from 1:00 P.M. until 5:00 P.M. on Saturdays. The fee is $3.00. THE BICYCLE MUST BE BROUGHT IN FOR LICENSING.
2. Have a Concord Police Officer check your bicycle equipment and return your copy of the summons, or some other proof of correction, signed by the officer, to the Police Department by next Friday.
3. Have your parents deprive you of the use of ANY bicycle for ____ days.
4. Copy Section ___ of the Concord Bicycle Ordinance _____ times and return it to the Police Department by next Friday.
5. Write a composition of not less than ___ words on the subject, "____." and return it to the Police Department by next Friday.
6. Verbal reprimand.

APPENDIX M

BEST COPY AVAILABLE

INSTRUCTIONS TO THE BAILIFF

Approximately 10 minutes before court is to convene, you will enter the courtroom and call the names of those persons listed on the court calendar. Have each person answer, "Here", to make certain that he is present. Each defendant will be directed to come to the front of the audience section and sit in the row of chairs arranged for the defendants. When the defendants have been seated, rejoin the judges in the conference room and inform the Chief Justice that the court is ready.

When court is to convene, you will enter the courtroom ahead of the judges and direct the people in the courtroom to stand by saying, "All rise please." When the judges are proceeding to their seats at the bench, you will proceed to the bailiff's table. Remain standing until the judges are seated. You will then announce, "Be seated", and take your seat.

When you are directed by the Chief Justice to call the first case, stand and call the first name on the court calendar. The defendant is to be directed to stand in front of the bench, facing the Chief Justice. (The exact location can be indicated by pointing to the place he is to stand.)

You will then read the oath from the case form. "(Defendant's first name), you have been called before this court on a serious matter. Do you promise to answer all questions truthfully?" Wait for the defendant to answer, which should be, "Yes", before continuing.

You will then read the charges. "Officer (Last name only) reports that at (Time) ,on (Date) , you ________(Charge)________."

At this time, you will hand all of the forms, and the summons, to the First Associate Justice (seated closest to you). Return to the Bailiff's table and be seated.

After each case is heard, the First Associate Justice will hand you the form containing the instructions, or disposition, which you will then hand to the defendant, along with the bicycle pamphlets. The defendant will then be directed, by you, to take his same seat.

You are to be alert to respond to any directions by the judges during court and to any disturbance which may disrupt the decorum of the court. All actions taken by you to stop any disturbance is to be done quietly so as not to add to the disturbance.

APPENDIX N

BEST COPY AVAILABLE

ADJUDICATION

ATTACHMENT H

MINNESOTA COMMUNITY
PLANNING KIT SECTION
ON COURTS

COURTS

bicycle safety planning guide

the need for judiciary support

Any enforcement program hinges on judicial support. Police officers won't cite bicycle traffic offenders if there is no procedure for dealing with violators or if the courts won't back their enforcement efforts. It does little good for police to stop violators if they can only talk to them or issue warnings regardless of the number of or seriousness of offenses. Judicial support is necessary for effective enforcement.

what is the function of a bicycle traffic court?

Courts for bicycle traffic law offenders should be positive and non threatening; *not* aimed at exacting monetary or restrictive punishment. They should teach appropriate bicycle driving techniques and attitudes and thus, make further appearances unnecessary.

A judge may be primarily responsible for establishing bicycle traffic court procedures. Police or other enforcement personnel may work with judges in establishing the procedures and the court. Often police conduct the schools or seminars for first and second offenses and courts deal with third offenders only.

Bicycle offenders may be handled in a separate bicycle traffic court, in a peer court, in an existing juvenile court, or in adult traffic court.

In the case of the peer court, juveniles who are tagged for bicycle traffic violations appear before a court made up of teens selected by their school teachers, principals, and/or counselors. These teens conduct the bicycle traffic court sessions meeting with offenders and deciding penalties for bicycle traffic law violations.

Following is a model court procedure which might be useful in your planning. Under the administration of the County Department of Court Services, a judge who handles juvenile matters conducts a juvenile bicycle court to deal with bicycle offenses committed by 7-17 year olds.

First Offense

Local police issue juvenile bicycle warning tags for first offenses. Parents of the offender are sent a copy of the tag and a letter explaining the bicycle safety program. A copy of this letter follows:

> Dear Parents:
>
> Enclosed is your copy of a Juvenile Bicycle Violation Warning Tag which was issued to your child for an alleged offense committed. A copy of that tag is also on file with the County Department of Court Services. These tags are used for violations of local ordinances and/or State of Minnesota Statutes governing the operation of bicycles on streets, roads, and highways of the County. (Please see the Minnesota State Statutes, Chapter 169.222 reproduced on the reverse side of this letter.)
>
> There is no court appearance necessary at this time in this matter. However, if further offenses are committed by your child, a petition to the "Bicycle Traffic Court" may be signed.
>
> The philosophy of the Bicycle Traffic Court is to encourage the practice of safe bicycling through an educational experience and is not criminal in nature. The Bicycle Safety Program was specifically developed to give children, as well as adults, the opportunity to learn traffic safety.
>
> Please explain to your child the seriousness of bicycle traffic violations and help him or her learn good, safe bicycle driving habits. For your assistance, I am enclosing appropriate materials.
>
> If you have any questions concerning the Bicycle Safety Program or the Bicycle Traffic Court, feel free to call me at the County Court House.

Second Offense

The second offense requires the appearance in Juvenile Bicycle Traffic Court. The offender must be accompanied by a parent or guardian during the court appearance. Again, parents are notified via letter:

> Dear Parent:
>
> Your child, ______________, has been issued _______ "Juvenile Bicycle Violation Warning" tags for alleged violations of local ordinances and/or State of Minnesota Statutes governing the operation of bicycles on the streets, roads, and highways of the county. (Please see the Minnesota State Statutes, Chapter 169.222 reproduced on the reverse side of this letter.") The specific offense(s) being:
>
> ____
>
> ____
>
> ____
>
> It is the policy of the Bicycle Traffic Court to aid the police in enforcing the traffic laws as applied to bicycles, by calling the child and his or her parents to Court on an informal basis. The Bicycle Traffic Court's philosophy is to encourage the practice of safe bicycling through an educational experience and is not criminal in nature. Therefore, appearance cannot be enforced for this educational program. If you feel your child will not benefit from this exposure to the laws of this State pertaining to bicycles, there is the alternative of exercising your right to a formal Court hearing.
>
> Please be present with your child at 9:00 a.m., Saturday, ______ ___________, 19____, in the Bicycle Traffic Court, Family Court Room, Family Court Division of the ________________ County Court, Court House, ________________, Minnesota. Failure to appear shall constitute notice that you wish a Court hearing and a petition alleging delinquency will be filed.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

The Police Department and the Court are interested in the saving of lives and prevention of injuries through this educational process. It is necessary that you accompany your child and your cooperation is appreciated.

If you have further questions concerning the Bicycle Traffic Court, please contact ________________.

The Juvenile Bicycle Court is especially concerned that the program not frighten children nor damage their relationship with the police. No judgment is monetary nor restrictive in nature.

Following are suggested penalties for bicycle traffic law violations:

1. The offender may be required to attend Bicycle Safety School.
2. Bicycle inspection and licensing may be required.
3. The offender may be required to write a paper of approximately 1000 words on the subject of bicycle safety.
4. The offender may be required to assist in a community project.
5. If the offense is sufficiently serious, the offender may be restrained from riding the bike for a specified period of time.

Third Offense

On third and subsequent offenses, the violator may be petitioned into Juvenile Traffic Court and the offense is handled in the same way as an automobile violation.

what are the needs of your community?

Those responsible for establishing the judiciary component of the comprehensive bicycle safety program need to survey the community. They need to find out:

1. What are the existing court procedures applying to bicycle traffic violations? ________________________________
____
____
____

2. What individuals, agencies are willing, able to plan and implement a court procedure for dealing with bicycle traffic violations? (Judges, police, other enforcement personnel, youths?) ________________________________
____
____

3. What are the existing enforcement procedures? ____________
____
____
____

4. Is there a need to educate judges to the need for judiciary support for enforcement of bicycle traffic laws?
____
____

5. How will the various agencies coordinate their enforcement/judiciary efforts? (What can courts do that police cannot?)
____
____
____
____

devising a plan for bicycle traffic courts

The planning process should result in a complete plan for a bicycle traffic court. The court procedure must have the full support of the police department and the community. The planning committee should address the following questions:

1. What is the citing procedure?
   for first offenses?
   for second offenses?
   for third offenses?
   for young (under 7) offenders?
   for adult offenders?
2. Will there be a special bicycle traffic court? Or special sessions of the existing juvenile court?
3. What format will the bicycle traffic court follow? (seminar, school, court, clinic, etc.?)
4. What instructional materials will be used? (printed? audio-visual?)
5. What penalties will be used?
   bicycle safety school?
   bicycle confiscation?
   restricted riding?
   inspection and licensing?
   community service projects?
6. What will be the costs of this court? How will it be funded?
7. How will the court be evaluated?

BEST COPY AVAILABLE

implementing the plan

Once the plan for a court procedure is developed it is necessary to consider some implementation questions.

1. Who will conduct the court?
   judge?
   peers?
   police?
   any combination of the above?

2. When will bicycle traffic court be held?

3. Where will bicycle traffic court be held?

4. How will parents of juvenile offenders be involved?
   notices, letters?
   copies of violations?
   required court appearances?

5. Who will be responsible for administrative tasks such as:
   correspondence?
   public relations?
   record keeping, reporting?
   scheduling court sessions?

BEST COPY AVAILABLE

BEST COPY AVAILABLE

evaluation

It is important to assess program effectiveness in terms of local bicycle statistics and use of the court.

1. Is there any decrease in bicycle accidents?
2. Is there any decrease in bicycle violations?
3. Is there any decrease in repeating offenders?
4. How extensively is the bicycle traffic court used?
   total number of court sessions?
   total number of participants?

More subjective data can also be used to evaluate overall program success. For example:

1. What was the general attitude of juveniles summoned to the court?
   of their parents?
   of enforcing officers?
   of the community in general?
2. Have people in the community become more aware of bicycle safety laws and the penalties for violations? (This data could be collected via random sample surveys conducted before and after the initiation of the bicycle safety program.)
3. Is there any evidence that an experience with the bicycle traffic court enhances learning about the court system?
4. Is there community support for continuing the program in the future?
   public relations support?
   financial support?
   volunteer staffing support?
   positive attitudes to reinforce the enforcement/court efforts?

These materials were created for the Minnesota Department of Education Traffic Safety Education Unit funded by Highway Safety Project Grant 27-78-042 through Minnesota State Department of Public Safety and produced by Jenny Publishing Company, Minneapolis.

Program Evaluation

General Comments

The highway safety field has suffered from a lack of well conceived effectiveness evaluations in virtually all areas. One outcome of this is the inappropriate use of resources in program areas that are ineffective, funding that could be applied to more promising areas. Precious few bicycle enforcement programs have even been tried in recent years, leading to little outcome data (and few reports) on successes or failures. This may be one reason that these efforts are often short-lived.

One major problem here is that evaluation is often an afterthought and that appropriate evaluation strategies are not built in from the beginning of a project. This section is intended to try to alleviate this problem, whereby some guidelines are given regarding the evaluation of a bicycle enforcement program. This section is not an evaluation primer, in that numerous well-written publications are available for the interested reader (1)(2)(3)(4).

It is hoped that the brief guidelines mentioned here will get the evaluation progress started in the right manner for a city or other jurisdiction undertaking a bicycle enforcement effort. If this happens, then a more formal evaluation, whether by the local police department, highway safety group or outside consultant, can be effected at the appropriate point in time.

Thoughts on What to Measure

Determining what to measure is largely a function of what the enforcement program consists of (i.e., what is the program supposed to do?). The jurisdiction should seriously consider just what the program is intended to accomplish, such as reduce bicycle accidents and injuries, increase the number of registered bicycles, increase the number of warning tickets or citations, etc. When these questions are identified, then a systematic way of obtaining relevant data can be formulated.

It is likely that an enforcement program will be geared toward reducing the number of bicycle accidents or injuries that occur in the community. If so, then the appropriateness of the basic North Carolina accident report form should be examined. Since the North Carolina form (like others) is designed to cover motor vehicle accidents, some assessment should be made to see if the proper bicycle accident and injury data will be generated by this form. For example, information on the type of bicycle accident (i.e., head-on, turning movement, etc.) is available only by analyzing the reporting investigator's narrative description and sketch. Information on part of the body injured is unavailable. If questions like these need answering, then perhaps a supplemental report form for bicycle accidents should be used. With a little thought, supplemental forms can be fairly easily constructed. The major question becomes -- what is the enforcement program supposed to do and how can this be measured?

Another point should be emphasized here. Whatever measures are taken or whatever the system, the data should be left as flexible as possible. This enables an analyst in turn to have flexibility in his approaches. Keeping the data flexible is akin to seeking the smallest common denominator. In other words, code and file the data on an accident or rider basis, such as:

Accident Number	Date	Rider Age	Rider Sex	Accident Type
81142266	1/15/81	12	M	Bicyclist left turn
81161473	1/28/81	15	M	Bicycle struck in rear
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.

This enables the analyst to crosstabulate variables to answer questions like:

Are turning accidents associated with certain age groups?

Are young males more frequently involved in certain accident types than young females?

Summing totals are fine for examining trends, but the ability to retrieve and assemble the data in a flexible manner is vital to the analyst.

Another concept related to data collection is preliminary analysis of prior data, perhaps better termed a problem identification stage. Before the whole enforcement program starts, it would be helpful to analyze any available accident and/or exposure data. In this fashion, one could hopefully address questions like:

Do we have a bicycle accident problem?

Is it confined to certain age and sex groups?

Is it confined to certain types of streets or certain locations in the community?

Are the accidents concentrated during a certain time of the year? or time of day?

Are certain accident types, like head-on impacts resulting from wrong-way riding, more prevalent than others?

Preliminary examination like this enables one to perhaps have a more structured or focused program. It also initiates thinking about the type of data elements that need to be collected for evaluation purposes. Then, ideally, data collection is phased in simultaneously with the program.

Baseline Data

Program evaluation will best be accomplished if there are adequate baseline data to identify the existing conditions before the program begins. These data also enable prediction of expected values (accidents, citations, etc.) during the time the program is in effect (i.e., what would have occurred based on prior data if the enforcement program had not been initiated?). Besides the notion of accident data, other baseline considerations include exposure measures like the community population, number of bicycles or riders, and more difficult-to-obtain measures like bicycle miles of travel or number of bicycles per mile. A procedure taken from a Santa Barbara, California study (5) that estimates the number of bicycles in operation at any one time and the number of bicycles per mile is shown as Attachment A to this section. Baseline measures like these need to be taken at periodic intervals once the program begins to better enable one to understand any change in accident frequency and/or severity, changes in numbers of bicyclist violations, citations, etc. In other words, if the number of bicycles per mile increases from 1.3 to 2.0 (an increase of 54 percent), then one might expect bicyclist violations, accidents, etc. to increase by about this same amount. Percentage increases in violations and accidents of a lesser magnitude may be an indication that the enforcement program is having some success. Depending on the complexity of the program and the desired outcome measures, surveys may also be needed.

Control or Comparison Data

Any type of evaluation of an enforcement program would be made stronger with the use of control or comparison data. This helps to clarify problems with basic before-after comparisons, namely: (1) that things would have stayed just as before with no intervention, and (2) that any changes are a result of the intervention. If an enforcement program is undertaken in a single city, it would be quite helpful from an evaluation standpoint to examine any changes in accident or exposure measures that take place in a comparable city (perhaps even another city in the county, as long as that city is unaffected by the new program). Again this implies the building in of the evaluation component from the very beginning.

Examples of What to Measure

As referred to throughout this section, the nature of the measured outcome variables is heavily dependent on the intent of the program. Nonetheless, some general comments can be made and examples given that will fit the most common situations.

One would hope that an enforcement program would reduce the frequency and/or rate of bicycle/motor vehicle accidents. Assuming that the criteria for getting reportable accidents into the system is unchanged, one could follow a method like that used by the California Highway Patrol (CHP) in examining bicycle accidents in that state. "Chart A, Statewide Fatal and Injury Bicycle Accidents, 1969-1973," taken directly from a CHP report (6) shows that four years of before data (1969-1972) were used to predict what would be expected in 1973 (12,284 accidents) without a bicycle enforcement emphasis. This is compared to the 10,535 accidents that actually occurred. Regression techniques were used to generate the 90 percent confidence interval around the expected value. Since the actual number of accidents was below the confidence interval, the CHP stated that a significant change had occurred. "Chart B, Bicycle Accidents per 1,000 Bicycles in Use, 1969-1973" was used to examine changes in accident rates.[1]

These comparisons pertain to bicycle accidents on a statewide basis and thus contain large numbers of accidents with which to work. This will not likely be the case for a particular community, meaning that statistically significant changes will be difficult to achieve without rather large changes in the number of accidents or accident rate. If the accident frequency is large enough, it is recommended that the community examine the changes in accident type and the changes in accident location. Concerning accident type, a preliminary analysis may indicate (similar to the Cross and Fisher data) that wrong-way riding contributes to a large number or percentage of head-on accidents between bicycles and motor vehicles. If one of the enforcement

---

[1] It should be noted that these are standard before-after plots that could have been strengthened by use of other comparison data.

CHART B

BICYCLE ACCIDENTS PER 1,000 BICYCLES IN USE
1969-1973

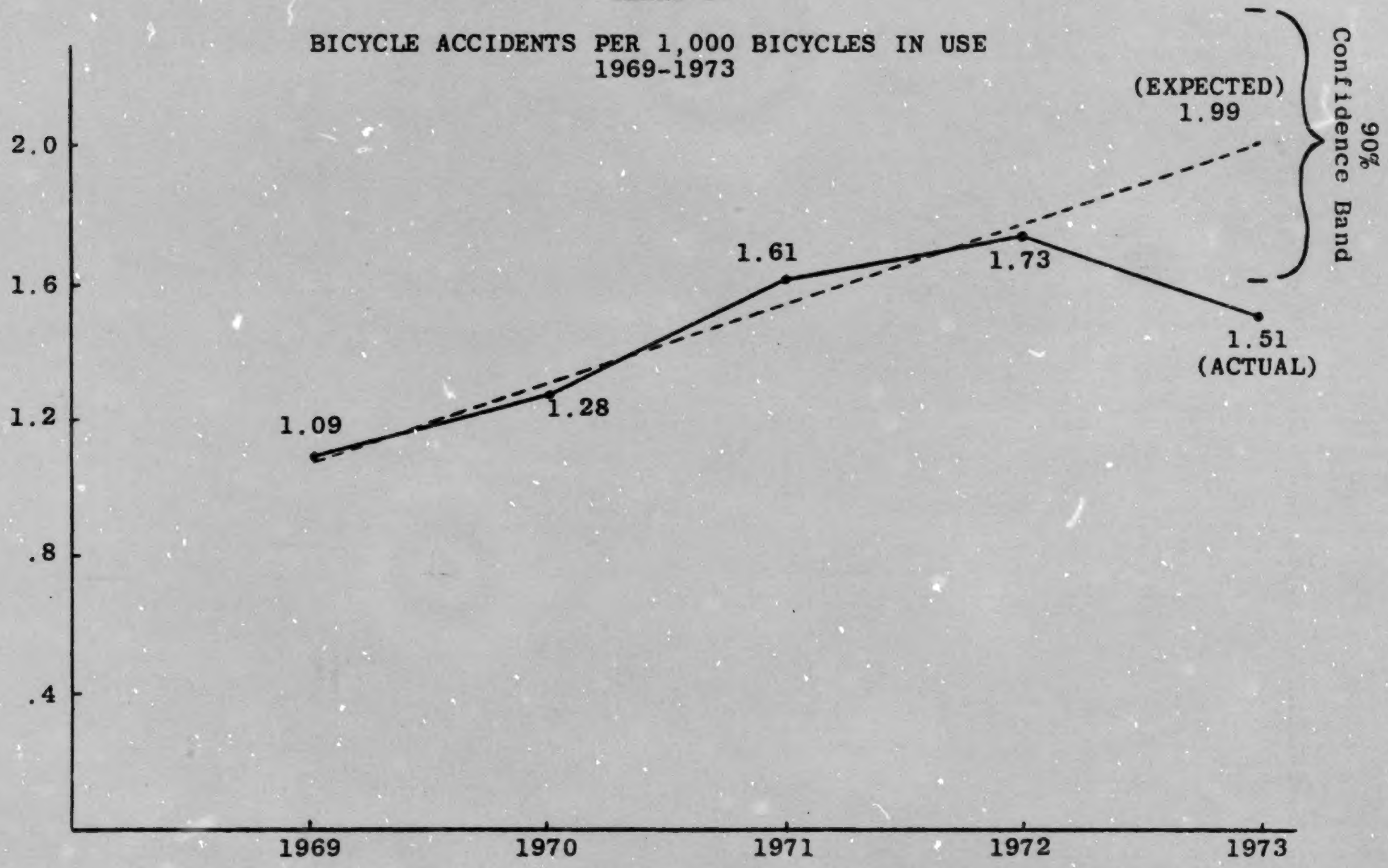
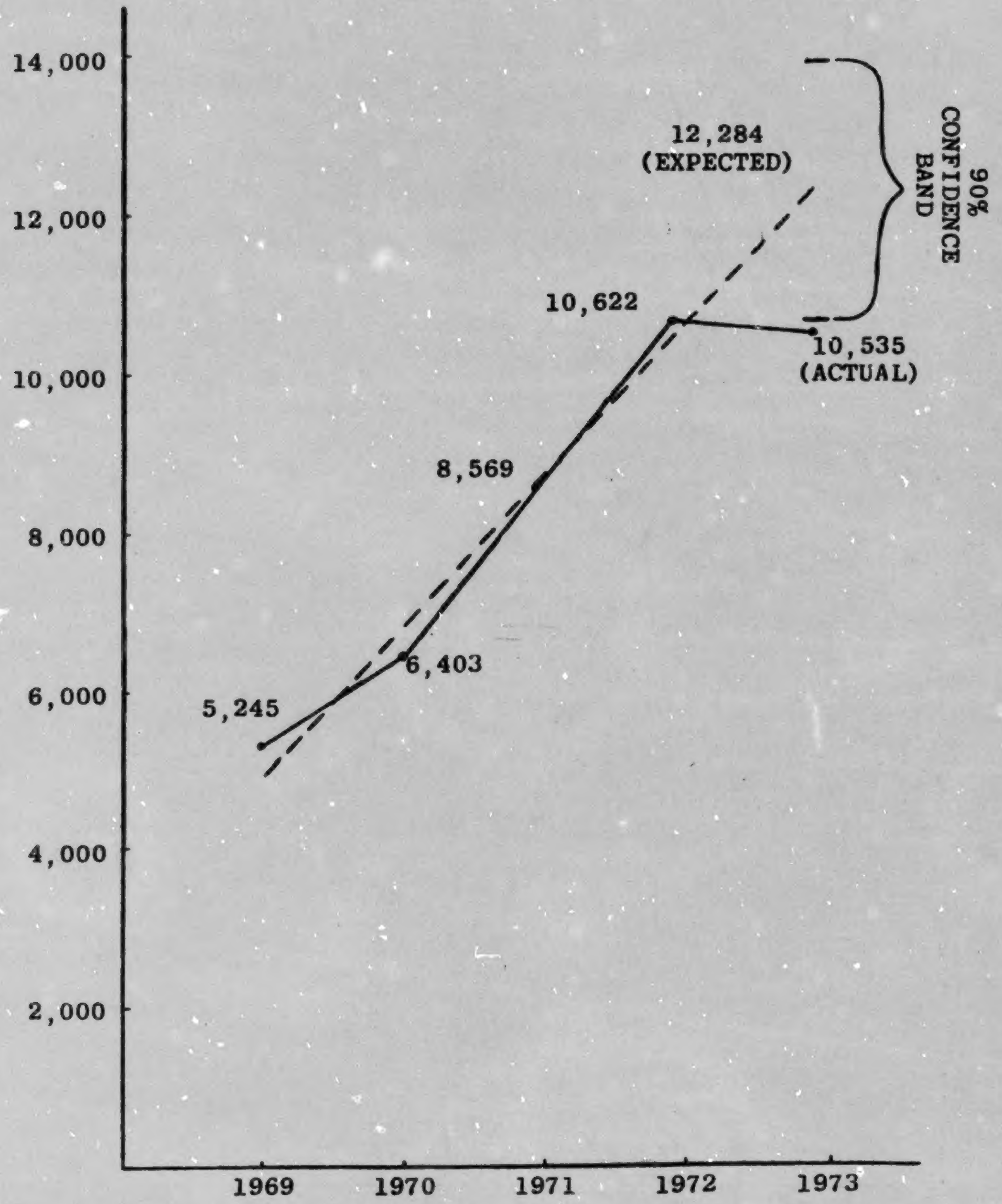


CHART A

STATEWIDE FATAL AND INJURY BICYCLE ACCIDENTS, 1969-1973



priorities relates to wrong-way riding, then it would be informative to look for changes in the head-on accident problem. The same is true for many other examples (e.g., does an increase in warnings and citations for improper bicyclist left turns relate to any change in the left turn accident problem?).

Along these lines, the National Highway Traffic Safety Administration (NHTSA) is currently developing a procedure for localities interested in retro-typing (classifying) their own bicycle accident data. Using a manual (perhaps accompanied with slides and/or cassette), the analyst for the locality works through a series of questions about each police-reported bicycle accident form. Answers to the questions lead to an accident type based on the classes identified in the Cross and Fisher study (e.g., bicycle rideout from driveway/alley, motorist turn-merge at intersection, etc.). Depending on the number of accident reports and/or the community resources, either a manual or computer procedure may be used to perform the actual classifying. Thus, the community may determine how their own bicycle accident patterns compare with national trends. In addition, the community can perhaps begin to get a feel for understanding the precipitating causes, contributing factors, etc. present in the bicycle accidents, which could possibly lead to some selective enforcement activity. The retro-typing manual will be distributed through the NHTSA Traffic Safety Program Driver and Pedestrian Education Division. Current plans call for the manuals and any accompanying materials to be distributed to the Governor's Highway Safety Program (GHSP) office within each state in early 1982. Localities could then obtain the instructional materials by contacting their GHSP office.

The preliminary analysis may have indicated increased enforcement activity at certain locations or on certain categories of streets. Again, accident data for these locations would be needed.

Other types of variables that can be measured include:

1. Percentage of at-fault bicyclists.
2. City population.
3. Number of bike patrols.
4. Hours worked.
5. Numbers of warning tickets and citations.
6. Bicycle contacts per hour of enforcement.
7. Number of seminars.
8. Seminar attendance and percentage who failed to attend.

9. Number of repeat violators.
10. Number of court referrals.
11. Numbers of bikes inspected, stolen, recovered.

Most, if not all, of these variables tend to be measured in the Minnesota communities participating in enforcement programs. Table 1 is an example of 1980 data (7).

It should be noted that among the list of candidate variables shown above are what might be called process measures. In other words, these are more related to administrative concerns and how the program is functioning instead of the "bottom line" impact issues of accidents and injuries. These are included because of the small numbers of bicycle accidents that typically occur in communities. Instead of "hanging one's hat" on the accident outcome (most assuredly an important criterion), look for additional measures of positive change.

Finally, some effort should be made to complete the cycle by allowing those receiving the treatment to give some feedback concerning its effectiveness. For example, education of youngsters seems to coincide with most effective enforcement programs. If this is done in the schools, then the teachers and students should have some mechanism for relaying their perceptions of what was presented. Referrals to a safety seminar or peer court should likewise have their chance to comment on the adjudication proceedings. Feedback like this can effect very constructive change.

Attachment B simply shows some examples of various record-keeping forms that may be utilized. Topics include a collision diagram, a monthly summary report, and some registration and licensing forms.

References

1. Council, F. M., Reinfurt, D. W., Campbell, B. J., Roediger, F. L., Carroll, C. L., Dutt, A. K., and Dunham, J. R. Accident Research Manual. Chapel Hill: University of North Carolina Highway Safety Research Center. Prepared for the Federal Highway Administration (Contract No. DOT-FH-11-9424), January 1980.

2. Vilardo, F. J. The Evaluation of Highway Traffic Safety Programs: A Manual for Managers. Bloomington: Indiana University Institute for Research in Public Safety, July 1975.

3. Croke, J. A. Management and Evaluation Handbook for Demonstration Projects in Traffic Safety. Washington, D.C.: Teknekron, Inc., February 1977.

Table 1. Minnesota examples of variables that can be measured.
(Source: Wagner, 1981)

1980 COMMUNITY PROGRAM DATA

	Population	# of Students	# of Bike Patols	Hours Worked	Accidents		Tickets	Total Enforcement Contacts	Seminars	BUDGET		
					79	80				Federal	Local	TOTAL
2nd Year Communities												
Brooklyn Park	42,000	8350	6	2021	11	8	545	3094	14	5003	2388	7391
Columbia Hts.	22,000	530	1	480	6	5	387	675	11	791	1009	1800
Cottage Grove	18,700	3065	2	1019	7	3	225	694	2	4080	132	4212
Duluth	100,000	2945	9	3563	*11	9	11	3827	0	2807	15,680	18,487
Hutchinson	10,000	1700	2	826	4	4	62	800	6	4016	3879	7895
Richfield	42,000	7300	6	2880	20	12	600	2300	25	5000	13,364	18,364
St. Cloud	43,000	1794	7	3004	11	11	77	636	5	4590	7943	12,533
St. Paul	240,000	2250	0	0	114	*150	0		0	3114	8200	11,314
Waseca	8,100	230	3	1000	1	1	128	965	5	4432	2662	7094
Willmar	17,000	2679	2	856	3	1	417	440	19	5000	4500	9500
1st Year Communities												
Annandale	1,400	886	2	589	0	0	6	41	1	2251	1449	3700
Brainerd	12,000	2000	2	460	8	4	156	278	8	3675	2620	6295
Breckenridge	3,800	500	4	64	1	3	0	16	1	3400	327	3727
Cloquet	11,400		5	1832	4	5	3	260	16	4058	837	4895
Dayton	5,000	101	0	0	1	0	0	0	0	200		200
Deer River	960	850	1	400	0	0	2	330	0	2090	800	2890
Edina	48,000	5095	0	272	17	12	2	769	9	4007	9459	13,466
Halstad	670	180	0	0	0	0	0	0	0	1300	1150	2450
Marshall	11,000	1900	8	2870	9	7	88	1963	4	4504	224	4728
Montevideo	5,600	830	3	827	1	3	287	424	4	4526	1683	6209
Mound	18,000	583	3	768	4	6	83	404	1	4219	2688	6907
New Hope	23,180	4200	4	934	13	11		4050	7	4120	3770	7890
St. Anthony	10,000	500	5	491	1	0	84	693	0	2749	3280	6029
Woodbury	10,200	2400	1	320	2	4	0	208	0	2078	642	2720
	TOTALS	50,868	81	25,476	249	259	3163	22,867	138	$82,010	$88,686	$170,696

*one fatality

4. Griffin, L. I., Powers, B. and Mullen, C. Impediments to the Evaluation of Highway Safety Programs. Chapel Hill: University of North Carolina Highway Safety Research Center, June 1975.

5. Popish, L. N. and Lytel, R. B. A Study of Bicycle-Motor Vehicle Accidents. City of Santa Barbara, California, June 1973.

6. California Highway Patrol. California Bicycle Accidents - Their Relationship to Enforcement and Equipment Factors, November 1974.

7. Wagner, S. K. 1980 Community Bicycle Safety Program (Final report). St. Paul: University of Minnesota Agricultural Extension Service, January 1981.

PROGRAM EVALUATION

ATTACHMENT A

EXAMPLE BICYCLE USAGE CALCULATIONS

9

BICYCLE USAGE*

Based on bicycle traffic as measured on a reference street carrying the greatest number of bicycles, and on estimates of traffic on other streets expressed as a percent of the reference, a procedure is developed for estimating overall bicycle traffic in Santa Barbara. The derived figure of 1.3 bicycles/mile is considered to be consistent with the results of extensive observations throughout the City. Also included: an estimated student bicycle usage rate of 8 percent based on counts made at City schools.

---

38. STREET TRAFFIC. From the outset of this study it was evident that little, if any, reliable information about the volume of bicycle traffic on Santa Barbara streets was available. Although not a principal task of the project a limited effort made to develop a method of estimating bicycle traffic density, is reported below. Such information is pertinent to various planning activities as well as to making quality judgments related to accident rates and safety practices.

The method or approach to this problem is not precise and cannot be so. It is, however, at least one way of obtaining a rough estimate of the number of bicycles on City streets and, at least in a general way, could be used in other communities.

If a means existed of obtaining, at any given time, an instantaneous count of all bicycles in the City's traffic system, we could, by using several different counts, obtain a very accurate average bicycle traffic volume. The method we developed and describe below is an attempt to approach this ideal.

---

*Source: Popish and Lytel, A Study of Bicycle-Motor Vehicle Accidents, 1973.

Based on extensive field experience gained in the completion of other study objectives it was possible to select the one street, designated street S,* that consistently carries the maximum bicycle traffic. Bicycle traffic over a prescribed length of S street was then counted at various times and on several different days.

Our desire was to make each count as quickly as possible in an effort to approach the ideal instantaneous count. Consequently, each count was made by rapidly driving the predetermined distance and tabulating all bicycles traveling the route. The count thus obtained yielded a measure of traffic volume on the most heavily traveled street in terms of the number of bicycles per mile.

The remainder of the method required knowing (1) the number of street miles in the City and (2) estimating the bicycle traffic, expressed as a percent of that observed on the reference street S , for the entire City. Street mileage is accurately known; the estimate of traffic on other streets was made by an experienced traffic officer and is considered to be adequately accurate for use in developing a rough estimate.

---

*State Street in Santa Barbara.

There are about 240 miles of roadway in Santa Barbara. It was estimated that (1) 5 percent carried the same bicycle traffic volume as street S , (2) 10 percent carried 75 percent of S traffic, (3) 10 percent carried 50 percent of S , (4) 20 percent carried 25 percent of S , and (5) 55 percent carried 10 percent of S volume.

Approximately 25 runs were made at five time periods on nine days in August 1972. For each time period the total bicycles counted and total miles traveled were used to determine an average bicycles/mile figure. The averages thus obtained were:

0800 hr	1.5 bicycles/mile
1000	3.3
1200	4.1
1400	4.6
1600	2.8

Because our interest was in obtaining an estimate of the maximum boundary, the highest average--4.6--was used in the overall City estimate.

If t_B is the total number of bicycles on City streets at a given point in time, m is the total City street mileage, and S the high-average bicycles/mile on the reference street, then (using the above estimates):

$$t_B = .05\ mS + .10\ m(.75S) + .10m(.5S) + .20\ m(.25S)$$
$$+ .55\ m(.1S)$$

or $t_B = 0.28\ mS$

If $m = 240$ miles and $S = 4.6$ bicycles/mile:

$$t_B = 0.28(240\ mi)(4.6\ bicycles/mi) = \sim 309\ bicycles$$

Using this method, therefore, the estimated average total number of bicycles present on Santa Barbara streets at a given time during the daylight hours (when the counts were made) is 309. Further, that estimate would be the high boundary.

Using the total street mileage m of 240, the average number of bicycles/mile a_B throughout the City is:

$$a_B = \frac{t_B}{m} = \frac{309}{240} = \sim 1.3\ bicycles/mile$$

That is, one would expect to see an average of 1.3 bicycles/mile throughout the entire City at any given daylight time.

How accurate are the figures derived in this manner? The figures, based on our experience, are reasonable; when interpreted in terms of being an estimate only, and one of a high boundary of bicycle traffic, we feel the estimates are sufficiently accurate to provide useful information.

Given more time, the method could be refined and the number of counts significantly increased. But as a corallary study to prime tasks, the time was not available in this instance.

It should perhaps be noted that the figures given above do not include large, relatively momentary, traffic flows. Several dozen cyclists exiting a City school, crowding a route for several minutes, and then dispersing and leaving the traffic system are not considered. Neither would a large number of recreational riders traveling a popular bicycle route on a Sunday morning contribute tc the estimated averages.

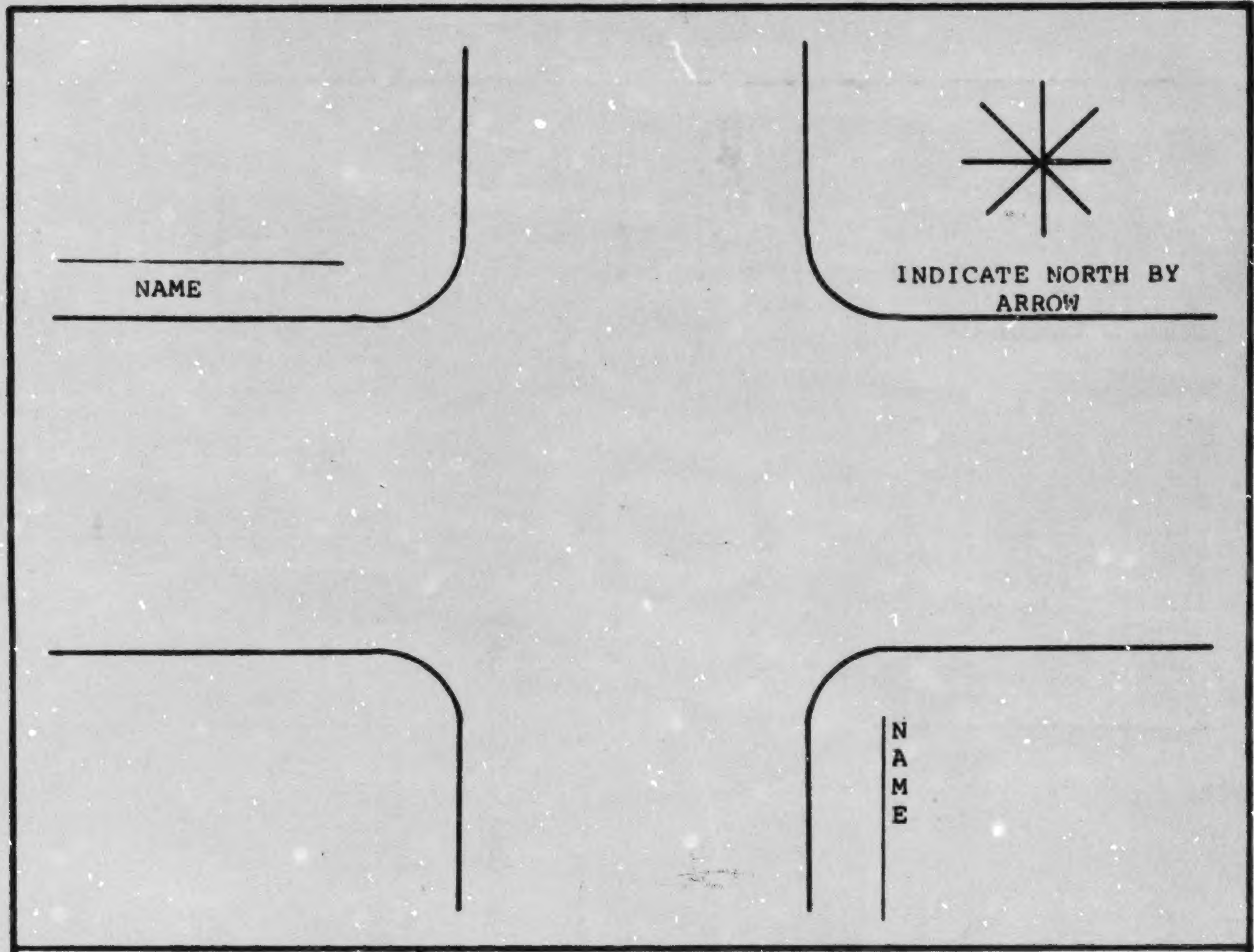
But excluding such brief influxes of bicycle traffic the estimates are probably accurate enough to help in establishing a frame of reference for determining the scope of the various aspects of the bicycle problem.

PROGRAM EVALUATION

ATTACHMENT B

EXAMPLE RECORD KEEPING FORMS

POLICE DEPARTMENT*
Richfield, Minnesota
Collision Diagram



SYMBOLS	
←———	Moving Vehicle
←>>>	BackingVehicle
←- - -	Pedestrian
▭	Parked Vehicle
□	Fixed Object
●	Fatal Accident
◉	Injury Accident

TYPES OF COLLISIONS	
←|←	Rear End
→×←	Head On
	Side Swipe
	Out of Control
→↙	Left Turn
↑←	Right Angle

SHOW FOR EACH ACCIDENT

1. Date and Time
2. Weather and Road Surface if unusual Condition Existed.

Intersection ______________________ and ______________________

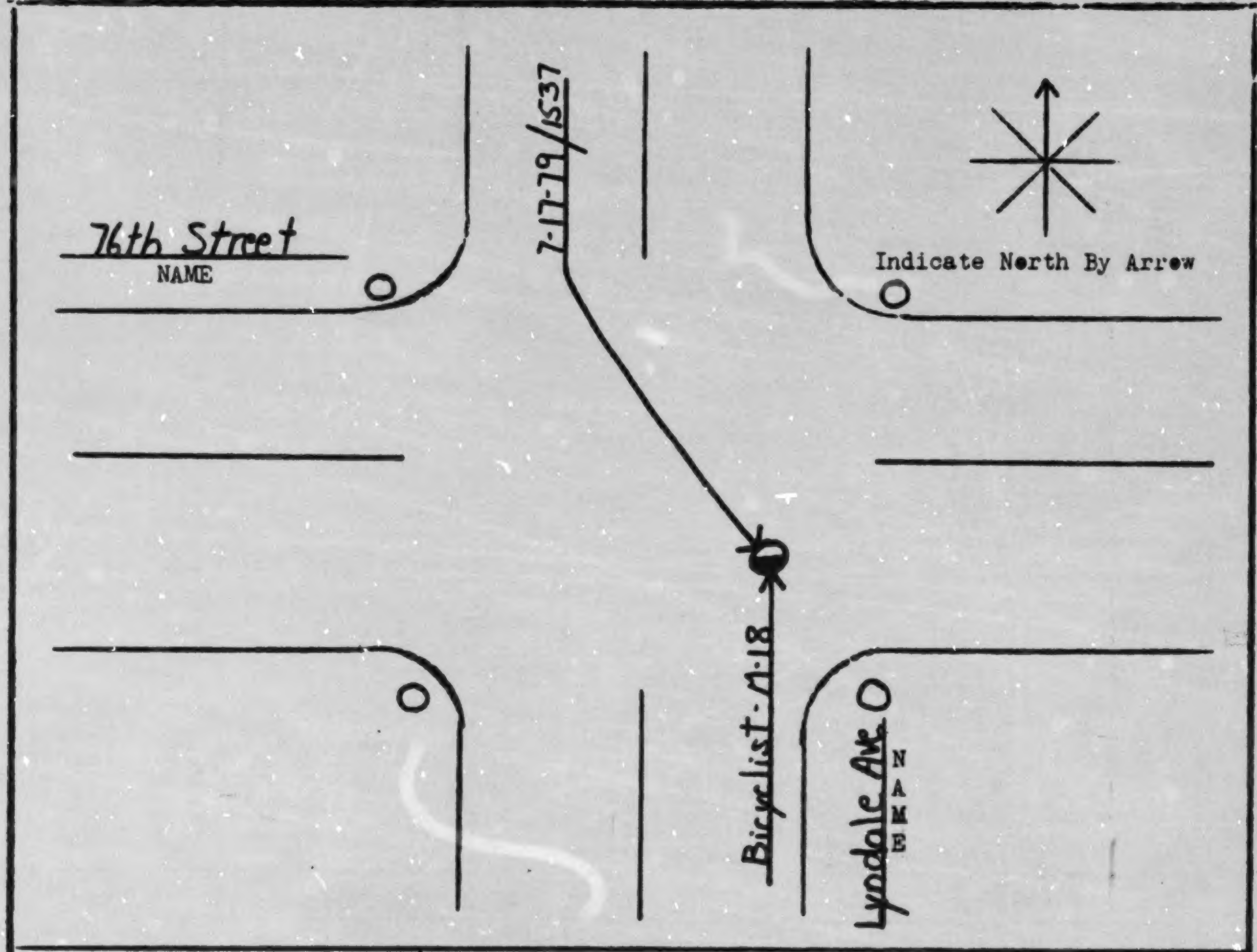
Period ______________ From ______________ To ______________

By ______________________ Date ______________________

C-Clear D-Dry CL-Cloudy W-Wet S-Snow

*Source: Minnesota _Bike Patrol Training Manual_.

POLICE DEPARTMENT
Richfield, Minnesota
COLLISION DIAGRAM


76th Street
NAME
7-17-79/1537
Indicate North By Arrow
Bicyclist-M-18
Lyndale Ave.
NAME

SYMBOLS	TYPES OF COLLISIONS		
← Moving Vehicle	Rear End	Right Angle	
Backing Vehicle	Head On		
Pedestrian	Side Swipe	SHOW FOR EACH ACCIDENT	
Parked Vehicle	Out of Control	1. Date and Time	
Fixed Object	Left Turn	2. Weather and Road Surface if Unusual Condition Existed	
● Fatal Accident			
Injury Accident			

INTERSECTION ______ and ______

PERIOD ______ FROM ______ TO ______

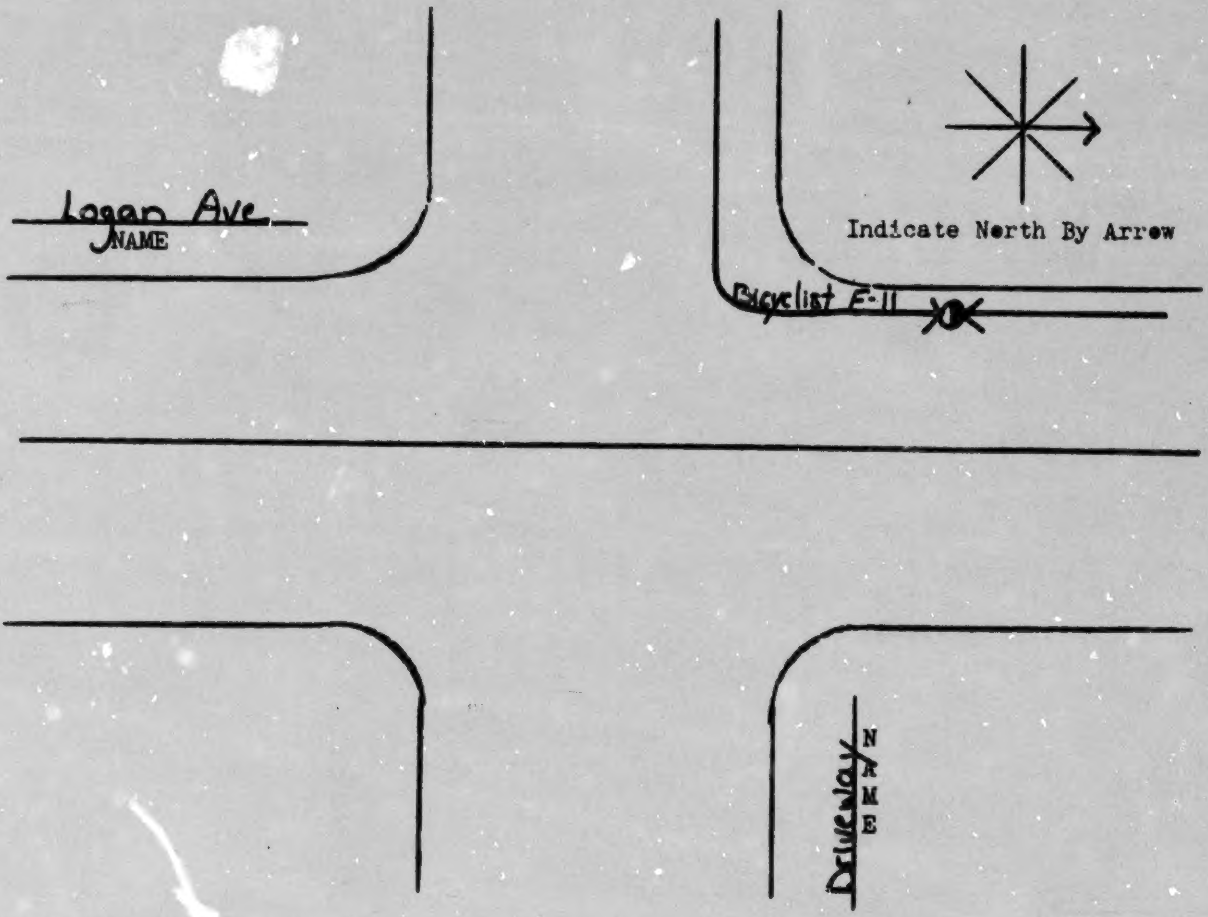
BY ______ DATE ______

411-59

BEST COPY AVAILABLE

POLICE DEPARTMENT
Richfield, Minnesota

COLLISION DIAGRAM


Logan Ave
NAME
Indicate North By Arrow
Bicyclist E-11
Driveway
NAME

SYMBOLS	TYPES OF COLLISIONS	
← Moving Vehicle	Rear End	Right Angle
Backing Vehicle	Head On	
← - - - Pedestrian	Side Swipe	
Parked Vehicle	Out of Control	
Fixed Object	Left Turn	
● Fatal Accident		
Injury Accident		

SHOW FOR EACH ACCIDENT

1. Date and Time
2. Weather and Road Surface if Unusual Condition Existed

INTERSECTION ______________ and ______________

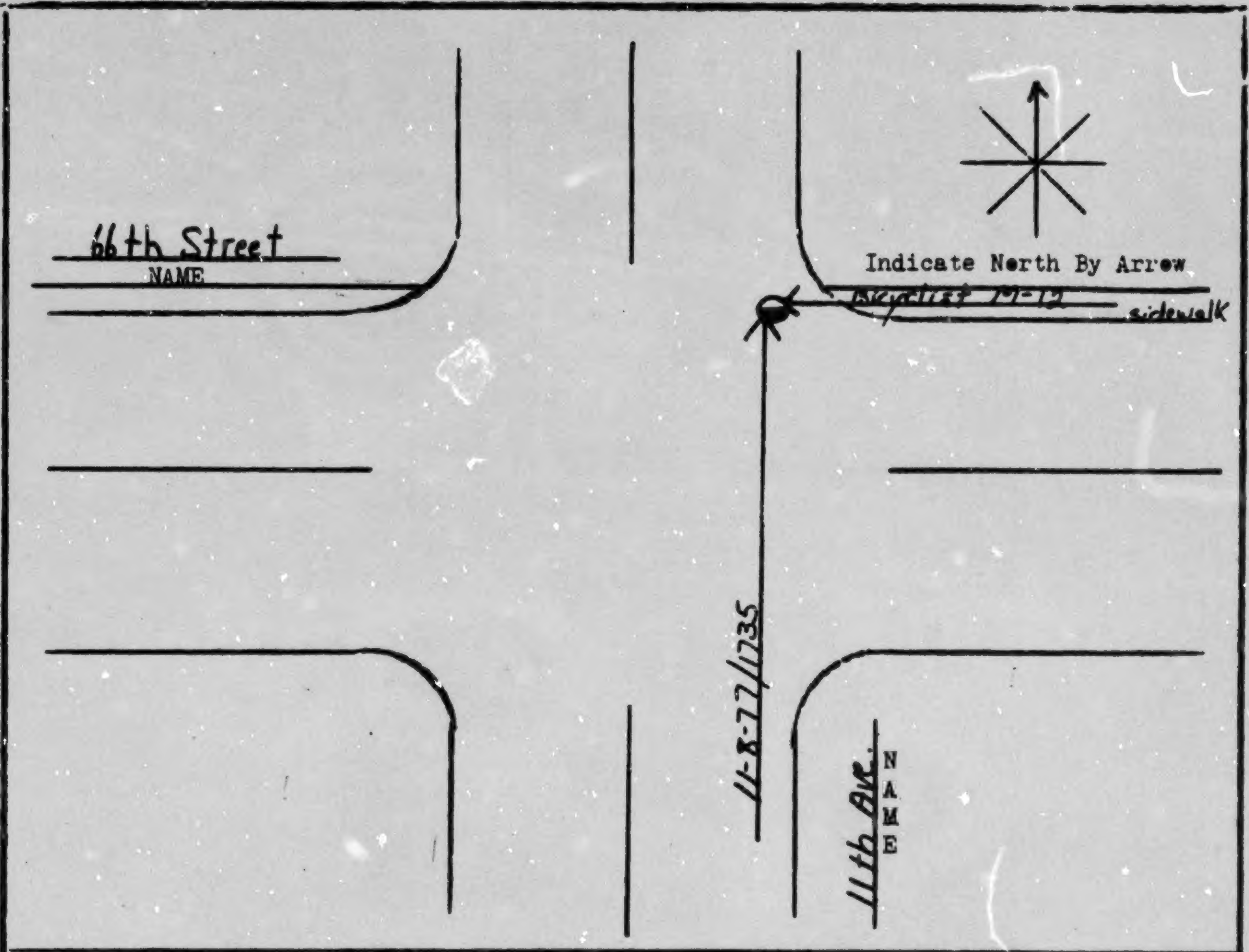
PERIOD ______________ FROM ______________ TO ______________

BY ______________ DATE ______________

411-59

BEST COPY AVAILABLE

POLICE DEPARTMENT
Richfield, Minnesota
COLLISION DIAGRAM


66th Street
NAME
Indicate North By Arrow
Bicyclist M-15
sidewalk
11-8-77/1735
11th Ave.
NAME

SYMBOLS	
←——	Moving Vehicle
←→→→	Backing Vehicle
← - - -	Pedestrian
▭	Parked Vehicle
☐	Fixed Object
●	Fatal Accident
◡	Injury Accident

TYPES OF COLLISIONS

←—|←—	Rear End
—→←—	Head On
←↙	Side Swipe
←••••	Out of Control
→↙	Left Turn
↑←	Right Angle

SHOW FOR EACH ACCIDENT

1. Date and Time
2. Weather and Road Surface if Unusual Condition Existed

INTERSECTION ______________ and ______________

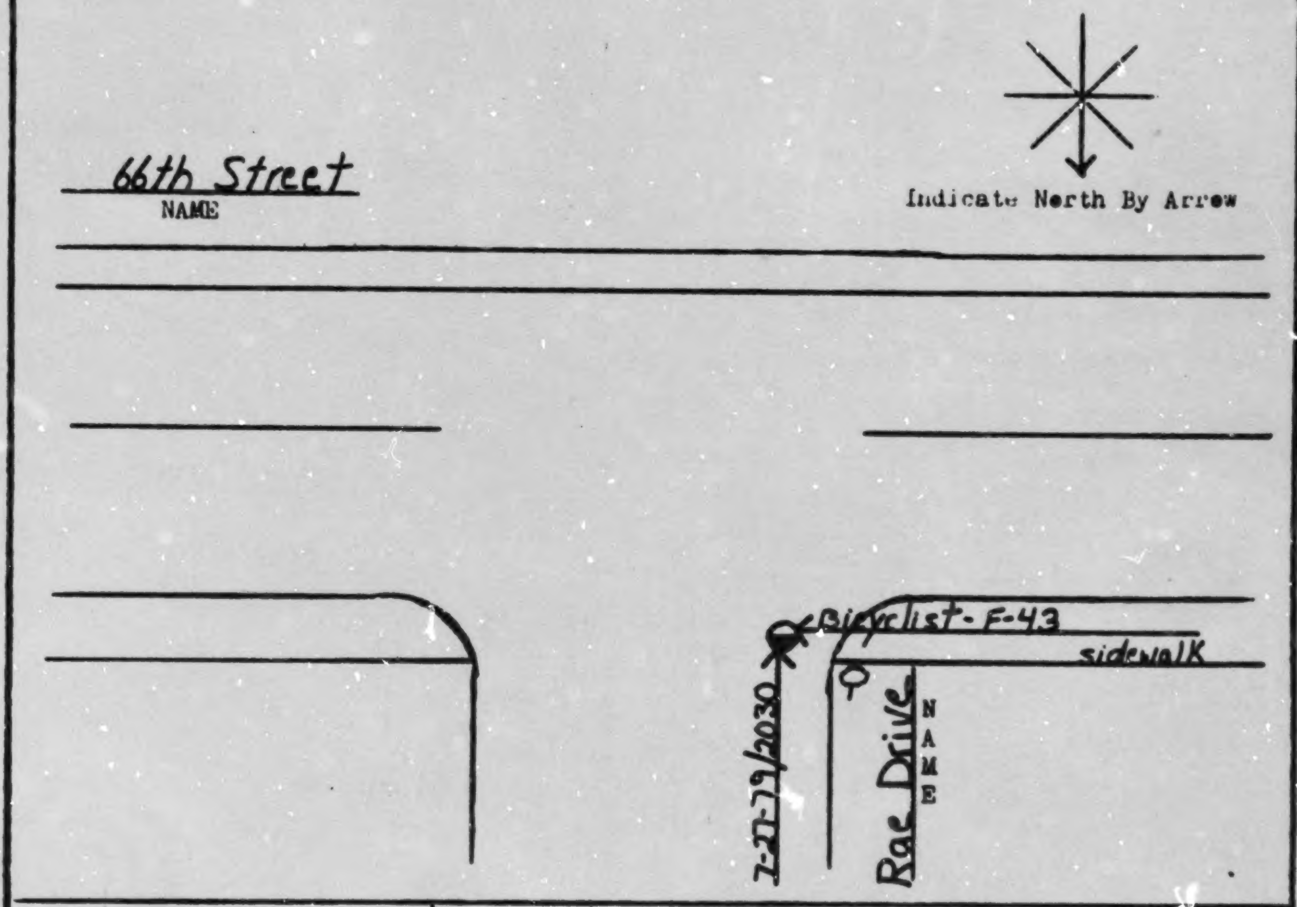
PERIOD ______________ FROM ______________ TO ______________

BY ______________ DATE ______________

411-59

BEST COPY AVAILABLE

POLICE DEPARTMENT
Richfield, Minnesota
COLLISION DIAGRAM


66th Street
NAME
Indicate North By Arrow
Bicyclist - F-43
sidewalk
7-27-79/2030
Rae Drive
NAME

SYMBOLS	TYPES OF COLLISIONS	
← Moving Vehicle ⇉ Backing Vehicle ← - - - Pedestrian ▭ Parked Vehicle ⊡ Fixed Object ● Fatal Accident ◒ Injury Accident	—|— Rear End →← Head On ⇇ Side Swipe ← Out of Control →↙ Left Turn	↖ Right Angle SHOW FOR EACH ACCIDENT 1. Date and Time 2. Weather and Road Surface if Unusual Condition Existed

INTERSECTION ____________________ and ____________________

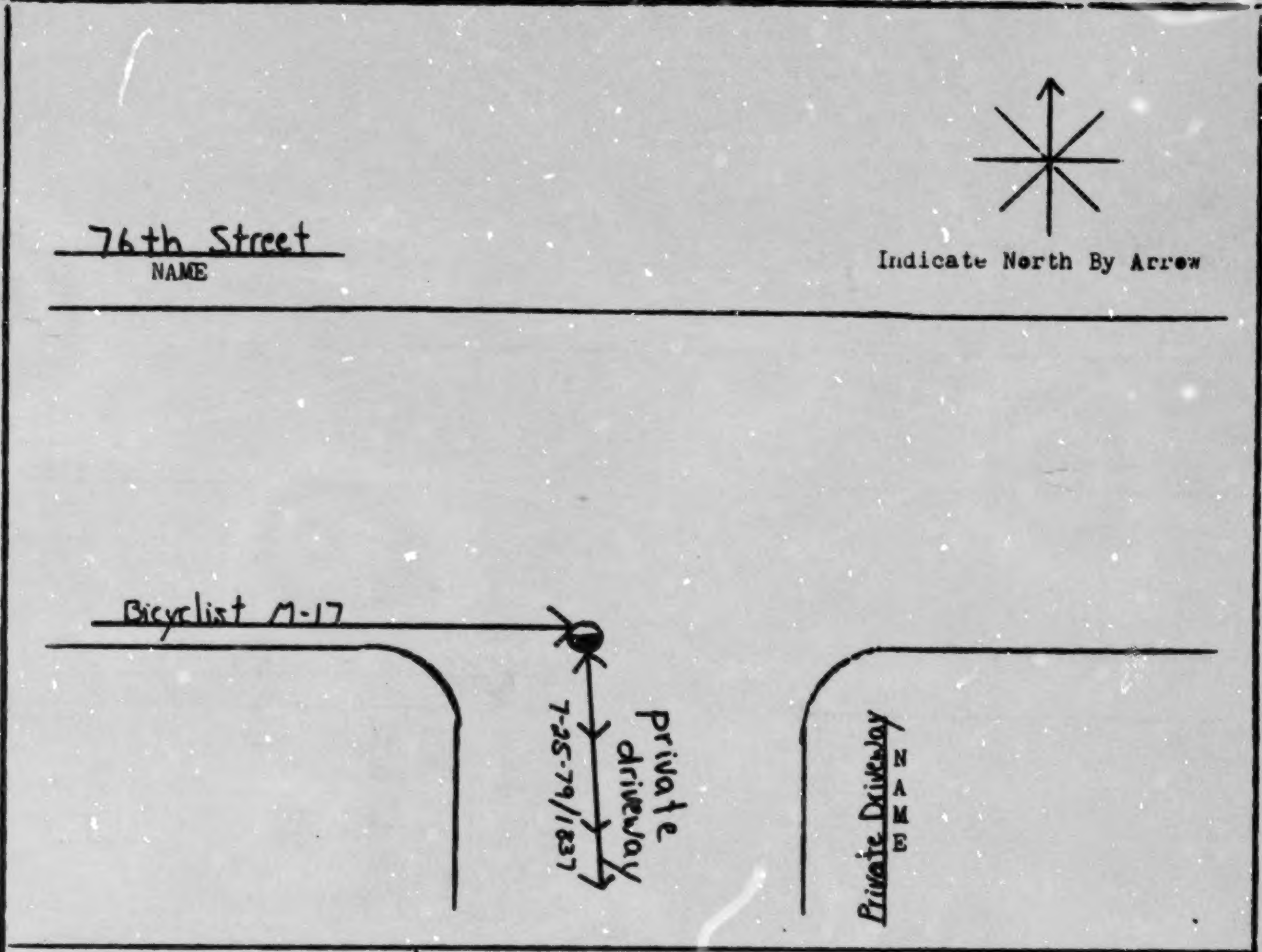
PERIOD ______________ FROM ______________ TO ______________

BY ____________________ DATE ____________________

411-59

BEST COPY AVAILABLE

POLICE DEPARTMENT
Richfield, Minnesota
COLLISION DIAGRAM


Indicate North By Arrow
76th Street
NAME
Bicyclist M-17
private driveway
7-25-79/1837
Private Driveway
NAME

SYMBOLS

- ←—— Moving Vehicle
- →→→ Backing Vehicle
- ← - - - Pedestrian
- ▭ Parked Vehicle
- ▭ Fixed Object
- ● Fatal Accident
- ◡ Injury Accident

TYPES OF COLLISIONS

- —|— Rear End
- →← Head On
- ←← Side Swipe
- ←~~ Out of Control
- →← Left Turn
- ↑← Right Angle

SHOW FOR EACH ACCIDENT

1. Date and Time
2. Weather and Road Surface if Unusual Condition Existed

INTERSECTION ____________ and ____________

PERIOD ____________ FROM ____________ TO ____________

BY ____________ DATE ____________

411-59

*Source: Santa Barbara Police Department Bicycle Enforcement Program, 1973.

SIXTH MONTH BICYCLE ACCIDENT SURVEY*

City of ______________ *Month Being Reported* ______________

Number of accidents involving bicycles: *Traffic*		
Non-traffic		
Number of bicyclists involved in accidents: *Killed*		
Injured		
Property damage only		
Number of arrests and citations:		
Identify the three most numerous C.V.C. violations	*1.*	
	2.	
	3.	
Number of official warnings issued: *Verbal*		
Written		

BEST COPY AVAILABLE

Sample Bicycle License Application and Registration Form*

(Front)

New Lic. No.	Last Name	First Name	Middle Name	Serial No.
Address			Phone No.	Date
Date of Birth		Age	School	

Make		Color of Frame:		Foot Brake ( )
		Color of Trim:		Hand Brake ( )
		WHEELS	FRAME	
	Regular ( )			
	Sting Ray ( )	20" ( )	15" ( )	Light.........( )
Boy's	2 speed ( )	24" ( )	17" ( )	Generator.....( )
( )	3 speed ( )	26" ( )	17", ( ) 19" ( )	Tail Light....( )
	5 speed ( )		21", ( ) 23" ( )	Reflector.....( )
Girl's	10 speed ( )	27" ( )	19", ( ) 21" ( )	Bell or Horn..( )
( )	15 speed ( )		22", ( ) 23" ( )	Shift.........( )
	Lightweight ( )		24", ( ) 25" ( )	

Parents are responsible for equipment and condition of the bicycle of a juvenile.

Signature ______________________
owner--parent--guardian

Police Department-- (city), Wisconsin

(Back)

Written Test

1	13
2	14
3	15
4	16
5	17
6	18
7	19
8	20
9	21
10	22
11	23
12	24
	25

Bicycle Inspection

Light		
missing	○	
inoperable	○	
Warning Device		
missing	○	
inoperable	○	
Rear Reflector		
missing	○	
Brake		
ineffective	○	
Handle Bars	Yes	No
correct height	○	○
grips tight	○	○
Chain Guard		
equipped	○	○
Chainwheel		
loose	○	○
Chain		
too loose	○	○
too tight	○	○
too rusty	○	○
Pedals		
loose	○	○
parts missing	○	○

	Yes	No
Seat		
correct height	○	○
loose	○	○
Fork		
loose	○	○
bent	○	○
Wheels		
wobble	○	○
loose	○	○
Tires		
good tread	○	○
Spokes		
tight	○	○
too loose	○	○
Frame		
broken	○	○
bent	○	○

SKILL TEST

	Pass	Fail
1. Mount/dismount	○	○
2. Circling	○	○
3. Balance	○	○
4. Straight line	○	○
5. Maneuvering	○	○
6. Stopping	○	○
7. Quick Direction Chg.	○	○
8. Signal	○	○

*Source: Hurley and Thompson, Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities, 1973.

BICYCLE REGISTRATION AND FILING CARDS*

SERIAL ________ YR. ______LICENSE ______
OWNER ________________________DATE __________
AGE __________
ADDRESS ___________________PHONE __________
PARENT OR GUARDIAN ____________________
DESCRIPTION:
MAKE ________ FENDERS FRONT ___ REAR
WHEELS: 20___24___26___28___ BOYS___GIRLS___
COLOR________________ TRIM__________
REMARKS______________________________

3" x 5" File Card can be filed either by serial or license no.

BICYCLE REGISTRATION CARD
City of Anderson, Ind.

Owner ______________________________
Address ______________________________
Make ______________ **Lic. No.** _____ **Ser. No.** ___

The accompanying number plate has been assigned to addressee named hereon to be used on above described bicycle for the year ending June 30, 19____.

Doyle Wright, Chief of Police

Report change of address or loss of this card.

____
Void unless signed by Licensee

3" x 5" Card for name file.

I PLEDGE TO:

1. Obey All Traffic Laws.
2. Keep My Bicycle In Good Condition.
3. Use Proper Hand Signals At All Times.
4. Keep To The Right Side Of The Street.
5. Give Pedestrians The Right-Of Way.
6. Never Carry Passengers.
7. Slow Down At All Street Corners.
8. Never Hitch Onto Other Vehicles.
9. Have A Warning Bell Or Horn.
10. Never Weave In Or Out Of Traffic.

Signed ______________________

3" x 5" Paper. Front same as file card. Back has safety rules for registrant.

These forms may be changed to comply with community regulations.

*Source: Indiana Department of Traffic Safety and Vehicle Inspection, Bicycle Safety Manual.

BEST COPY AVAILABLE

Community Support

The Need

A consistent thread runs through most of the bicycle enforcement efforts that appear to be successful -- the thread of community or systemwide participation. This is to say that no enforcement program can operate on its own very successfully. Education and community support are also vital elements. Many elements of the community must come together to advance or promote the concept, including parents, schools, riders, local businesses, the media, etc. When this happens the enforcement program is better understood and receives a better commitment of resources. Indeed, the proper sequence would logically have the community support steps well in place before any actual enforcement ever takes place. Based on the comments of participants in the Regional Workshops on Bicycle Safety (1), Darago states:

> Several participants who reported enforcement programs which did not receive significant adverse public reaction attributed this favorable outcome to the publicity campaign in the press and the media which preceded the enforcement effort by at least one month. A feature of the publicity was to present the message that enforcement would be in the public interest because cyclists were being hurt in accidents caused by failure to observe certain rules of the road. The publicity also outlined specific violations which would be enforced.

Additionally, the conclusions section of the Illinois DOT evaluation report (2) of several bicycle enforcement programs declares:

> Evidence from all five projects indicates that lack of community understanding and support will undermine implementation of projects. This problem has prevented aggressive enforcement in some cities, establishment of peer courts in others, and has led to a lack of respect for the bicycle patrol cadets. The overriding message that became clear as each project was reviewed is that the primary challenge in conducting a bicycle safety project is to convey to the public the goal of preventing injuries and deaths and that obedience to traffic laws is vital to this purpose. Otherwise, project activities may be perceived as harassment of children or a scheme to create summer jobs for college students.

Methods

The Cranford, New Jersey, enforcement program is generally recognized as successful. Although no data are given, this summary report (3) states that after the program the bicycle accident rate decreased 45 percent and the injury rate 50 percent with no major injuries occurring. Cranford has utilized an extensive media campaign to publicize the effort. The following list is basically derived from their promotional activity and should give any community a variety of ideas from which a publicity campaign might be developed:

1. Television, radio spots and films about the need for enforcement and how enforcement would take place.
2. Newspaper stories and editorials similar to the television and radio spots.
3. Billboards, handmade signs and banners, and traffic signs emphasizing certain themes like "BIKE on the RIGHT."
4. Newsletters, flyers, posters and pamphlets distributed in the schools, local businesses, public libraries, government buildings, etc.
5. Campaign-like paraphernalia (again emphasizing a theme) such as buttons, bumper stickers, balloons, etc. Buttons were used as tie-tacks and/or pinned on shirts, dresses, sleeves, hats, pants, jackets and belts.
6. Other articles of clothing like T-shirts or hats.
7. Comic books and book covers.
8. Placemats in restaurants.
9. Safety pennants or flags.
10. Special events like bike rodeos, bicycle week, bikeathons, races, bike hikes, etc.

Besides these promotional events, other avenues include safety presentations at schools, PTA's or civic clubs and required bicycling courses in the schools. Motorists can receive information about sharing the roadway with bicyclists through: (1) handbooks for driver's education courses, (2) driver license handbooks and tests, (3) the driver license renewal letter, and (4) state defensive driving courses.

Summary

The emphasis here is on community-wide acceptance of the bicycle enforcement concept, including riders of all ages, parents, police, the media, teachers, judges, local business persons, and drivers who must learn to share the roadway with bicyclists. Such coordinated acceptance can lead to many innovative techniques for promoting enforcement and/or riding themes. Attachment A, from the Minnesota Community Planning Kit, enhances this concept.

References

1. Darago, Vincent S. Regional Workshops on Bicycle Safety: Presentations, Participant Problems, Programs and Ideas, and Recommendations. Washington, DC: Urban Scientific and Educational Research, Inc., September 1978.

2. Sidhu, C. S., O'Brien, J. P. and Berroyer, C. J. Illinois Bicycle Safety Program Evaluation Report (draft copy). Springfield: Department of Transportation, Division of Traffic Safety, October 1980.

3. Cranford Police Department. Bicycle Safety Alert Program, n.d.

COMMUNITY SUPPORT

ATTACHMENT A

MINNESOTA COMMUNITY PLANNING KIT SECTION ON COMMUNITY ORGANIZATIONS

COMMUNITY ORGANIZATIONS

bicycle safety planning guide

why involve community organizations in your bicycle safety program

Considering the bicycle a toy for children or a recreational vehicle for adults, too many people are simply unaware of the tremendous responsibility bike riding is. Children are given bicycles with no more instructions than how to pedal and balance at the same time. Many teen and adult bicyclists think traffic laws don't apply to bicycles.

There is a need to teach kids and adults that bicycles are vehicles governed by traffic laws and that violations are against the law. Bicycle safety education and enforcement programs sponsored by schools, police departments, and courts, can teach children bicycle safety measures and traffic laws. But to be most effective they need support from the community. Parents need to be informed about these programs so they can reinforce and support what their children are learning. Teen and adult bicyclists as motorists also need to know the laws and enforcement procedures.

Community Organizations—service groups, merchants, youth groups, professional groups, neighborhood groups, and many others—can assist the educational, enforcement, and judicial components of a bicycle safety program by publicizing the program and eliciting community-wide support.

Not all community organizations will choose to become involved. That's all right. A few dedicated groups working with schools, police departments, and courts can publicize the program, and sponsor events which will gain the attention of other groups in the community.

In St. Cloud, Burger King and Jack's Bicycle Shop worked with the schools, police department, county extension service, and V.F.W. to sponsor Neighborhood Bicycle Safety Events. Burger King provided publicity, staff, certificates and treats. Jack's Bicycle Shop closes during the events and their employees conduct bicycle safety checks for participants.

Response to the events was so positive that the next year the Women's Medical Auxiliary donated money to the program and McDonald's restaurant asked to sponsor some part of the program.

what can community organizations do?

In order to reach an entire community bicycle safety programs need publicity. They also need a vehicle for dissemination of bicycle safety information to people not reached by the educational program.

Community organizations need to work with the educational, enforcement, and judiciary components of the program in order to assess the specific needs. Needs which can be met by community organizations are:

(1) Publicity and advertising
(2) Information dissemination
(3) Money
(4) Sponsorship of events (rodeos, clinics, inspections and registrations)
(5) Staffing for events
(6) Sponsoring, initiating, financing long range projects such as construction of bike paths, bike ra[illegible] etc.
(7) Assisting with bicycle safety education in:
    a) community education classes
    b) teacher workshops
    c) elementary/junior high classes
    d) classes for senior citizen bicyclists
(8) Assisting with enforcement
    a) patroling streets, tagging violators
    b) conducting seminars, courts for violators

Community organizations can be involved in any or all of the above tasks depending upon the needs of the community and the resources provided by other agencies.

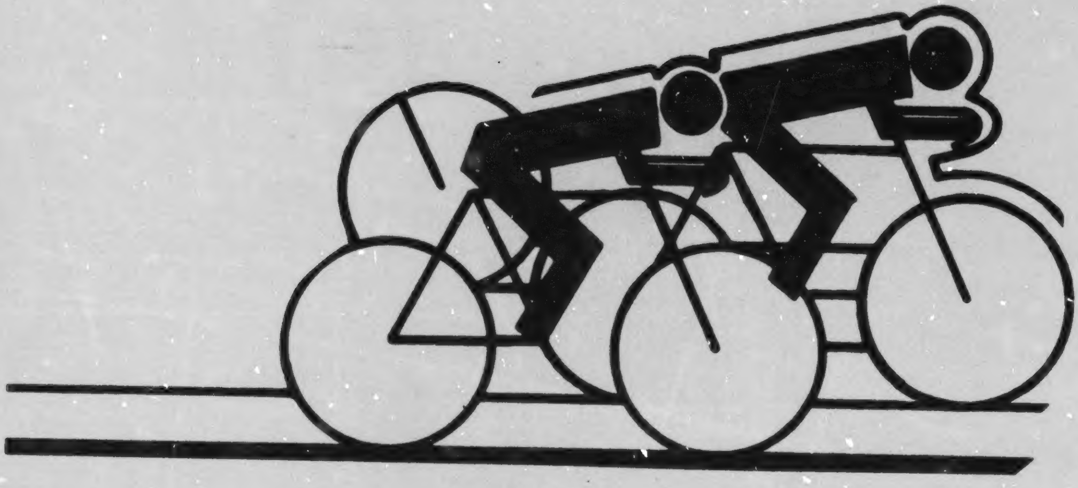
establishing a plan

The planning process should result in a complete plan for the community component of the bicycle safety program including the tasks to be undertaken. The following checklist will help you in establishing your plan.

Check the tasks which will be carried out by community organizations, then in the right hand column briefly describe what this task will involve.

Check Here		
	Publicity	
	Information Dissemination	
	Sponsoring Events (list events)	
	Assisting with events sponsored by other agencies	— staff? — money? — facilities?
	Financing (contributions)	

Check Here		
	Long-Range Projects (list projects) ___ sponsor ___ organize ___ finance	
	Assist with Educational Component	
	Assist with Enforcement Component	
	Assist with Judiciary Component	



implementing the plan

This is the "doing it" phase of the program. Before "doing it," however, it is necessary to establish Who? How? Where? and When?

The list of community groups which can and do become involved in bicycle safety programs is endless. Some are:

- Jaycees
- Lions
- P.T.A.
- Kiwanis
- Optimists
- V.F.W.
- State Police
- Motor Vehicle Departments
- Safety Councils
- Highway Departments
- Bicycle Clubs
- Automobile Clubs
- Girl/Boy Scouts
- 4-H
- YMCA/YWCA
- Youth Hostels
- YMHA
- Bicycle Retailers
- Insurance Companies
- Merchants
- Professional Groups
- Neighborhood Associations
- Red Cross Chapters
- Labor Unions
- Radio, T.V. stations
- Newspapers

The following questions can help you plan the implementation phase of your bicycle safety program.

Questions

1. What community organizations will be involved? (list organizations and contact person and phone numbers)

organization	contact person	phone #

2. How will the tasks be carried out?

   a. Example: In what ways can the bicycle safety program best be publicized? (Newspapers? radio? T.V.? community-wide bicycle safety publicity campaigns?) What materials need to be provided to the media? (Program descriptions, calendars of events, announcements, local bicycle statistics?)

   b. How can people in the community not reached by the schools be informed? (The media, brochures, fliers, letters? How will they be distributed?)

   c. How can this group best participate in, and/or sponsor, bicycle safety events?

   d. How can this group raise money for the bicycle safety program?

3. Where will events be conducted?

4. When will the program be initiated? (calendar of events, timetable)

5. How is the program being documented?

evaluation

To evaluate the effectiveness of the community-wide program, it will be necessary to look at acceptance of and attitudes toward the program as well as number and level of participation by community organizations.

Questions

1. Who will evaluate the overall program?
2. What evaluation devices will be used?
3. How many community organizations participated?
4. How many bicyclists were involved?
5. Letters, comments, notices given the program by citizens, the media, etc.
6. Attitudes of participants and sponsoring agencies? (Kids, adults, motorists, police, teachers, judges, community organization members)
7. Violation statistics?
8. Accident statistics?

These materials were created for the Minnesota Department of Education Traffic Safety Education Unit funded by Highway Safety Project Grant 27-78-042 through Minnesota State Department of Public Safety and produced by Jenny Publishing Company, Minneapolis.

ROLE OF THE BICYCLE OFFICER

Overall Program Design and Implementation

For lack of a better term, bicycle officer will be used to denote the individual in charge of the enforcement program. After reading about efforts in various U.S. cities, the best chance of program success seems to occur when the bicycle officer is a full-time position. This is because the position requires the person to wear many hats and accept a variety of roles. In designing and implementing an enforcement program, some of these roles or responsibilities include:

- Evaluating community attitudes and needs regarding bicyclists.
- Reviewing local ordinances pertaining to bicyclists.
- Determining the enforcement procedures.
- Setting up the adjudication system.
- Deciding what violations to enforce.
- Working to ensure community acceptance and media support.
- Setting up the administrative record keeping.
- Performing internal program evaluation or review.

These elements have been covered in detail in the preceding section and are mentioned again primarily for emphasis. It should be noted that both the N.C. Department of Transportation Bicycle Program and the University of North Carolina Highway Safety Research Center stand ready to assist any North Carolina community undertaking an effort like this.

Personnel Alternatives

Because of the necessity of close coordination with the components of an enforcement system (police, courts, etc.), it is usually the case that a police officer already familiar with the system assumes the bicycle officer position. The program can function successfully otherwise, but a bicycle officer who is a policeman probably has a better chance than a newcomer of motivating other police officers to carry out the actual program. The bicycle officer also needs a large amount of personal interest and motivation, because the potential stumbling blocks are many. To have a successful program, a large number of people within the community will need convincing.

Attachment A to this section is a reprinted interview from Bicycle Forum magazine (1) with two "bike cops" from the city of Davis, California, a community with a large bicycle population. In this instance, one officer works for the University of California at Davis Police Department and the other for the City of Davis Police Department. The arrangment here, and the setting for the interview, is a team effort by the two to enforce an intersection with heavy bike traffic. Besides focusing on a personnel alternative, the article gives an excellent insight to the duties, needs, responsibilities, etc. that make up the role of a bicycle enforcement officer.

There are obviously some different personnel arrangements for any enforcement program, and some evaluation of community needs and desires would help to focus the situation. The "Do-It-Yourself Enforcement Program Exam" (2) is Attachment B to this section and covers most, if not all, of the major issues. If an evaluation like this is undertaken, it should be easier to decide among options like:

1. Will the bicycle officer be more safety education oriented than enforcement oriented?

2. Can student bike patrols handle the enforcement effort during summer months?

3. Is a more comprehensive program needed of perhaps both student patrols and regular police officer patrols?

Needs will have to be matched with available funding to determine the most effective personnel set-up. Many communities in Minnesota have done rather well using small grants to fund summer patrols comprised of students. Other communities have designated whole police squads as the bicycle enforcement unit. In essence, most of the community situations are rather unique.

Police and/or Student Patrol Motivation and Training

Bicycle law enforcement is a low priority item in most communities, in that other competing needs generate more attention. The same can be said about personnel assigned to a bicycle unit--especially if they are policemen. It is natural that these people see issues like crime prevention as being more important than "ticketing kids on bicycles." Thus, the Bicycle Officer will likely be required to spend some amounts of time educating, motivating and training his forces, whether they be students or regular police officers. A variety of approaches have been tried in other enforcement programs, some of which will be discussed below.

In the early 1970's, Santa Barbara County, California, used three methods to try to increase the police officers' motivation toward the enforcement of bicycle laws (3), including:

1. A questionnaire used to collect information about current practices and safety education knowledge from the officers of each agency involved, so that tailored instruction could be developed. The questionnaire is shown as Attachment C at the end of this section.

2. Bicycle accident statistics relevant to each agency involved, in an attempt to "bring the realism of the accident problem to the officers."

3. A film produced by the Santa Barbara City Police Department entitled Ride on By, which very effectively shows how police enforcement can be used to alleviate the bicycle accident problem.

Another motivational aid involves sharing the knowledge or results from the Cross and Fisher study (4) with the patrol members. This can show that many of the accidents are attributable to improper bicyclist behaviors that enforcement and education can help to prevent. In addition, most of the accident types developed in the Cross study tend to occur on residential or city streets, locations where enforcement actions can be readily implemented.

Finally, some mention can be made of results from other successful enforcement efforts. The attachment to the example programs section has a fairly extensive write-up of a number of programs.

Record Keeping and Program Evaluation

Unless the community has a computerized records function or unless a consultant is used to design an evaluation, the tasks of record keeping and program evaluation may well fall on the Bicycle Officer. The earlier comments from the Program Evaluation section are pertinent here. Whatever kinds of data are kept, it is imperative that they be well organized. This can accomplish at least two major purposes: (1) allow the Bicycle Officer ready access to figures whenever he is called upon to justify his program or in other situations where a presentation is required, and (2) allow other analysts to thoroughly examine the data if this course of action is taken.

References

1. Williams, J. Caution: Bike Cops Ahead. Bicycle Forum Magazine, Number 7, June, 1981, pp. 26-32.

2. Darago, V. Bicycle Safety Atlas. Washington, D.C.: Urban Scientific and Educational Research, Inc., January 1978.

3. University of California at Santa Barbara Police Department. Santa Barbara County Bicycle Safety Project. Report prepared for the California Office of Traffic Safety, October 1979.

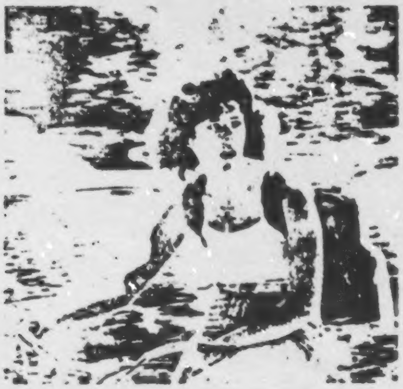
4. Cross, K. D. and Fisher, G. A Study of Bicycle/Motor Vehicle Accidents: Identification of Problem Types and Countermeasure Approaches. Anacapa Sciences, Incorporated. Report prepared for the National Highway Traffic Safety Administration, September 1977.

ROLE OF THE BICYCLE OFFICER

ATTACHMENT A

A BICYCLE FORUM MAGAZINE INTERVIEW WITH TWO BICYCLE ENFORCEMENT OFFICERS

Reprinted with permission of Bicycle Forum Magazine. Reproduction by any means without the expressed written permission of Bicycle Forum is prohibited. Copyright 1981 Bicycle Forum Magazine.



CAUTION: Bike Cops

Many communities have experimented with bicycle patrols as a means of enforcing traffic laws, usually with deputized officers especially charged with bicycle-related duties. In this interview, we look at such a program from the "bike cop's" perspective. In May 1980, **Bicycle Forum** *Editor John Williams talked with Dave Beale, of the University of California at Davis Police Department, and John Wilson, of the City of Davis Police Department. Williams found them working together at the corner of Third and A Streets, on the boundary between City and University jurisdiction. (This four-way intersection has three legs accessible only to bikes, with three stop signs and low compliance. It is heavily enforced by the bike cops.)*

Bicycle Forum: *Do you work full-time, from dawn to dusk, or some particular hours?*

Dave Beale: Full-time, from 8 to 5, and the hours are adapted as necessary. For example, when we start having problems with people not using lights at night, I'll work a swing shift. If we have a lot of thefts in a certain area over the weekend, I might work a shift then. It's fairly varied.

BF: *I see your associate has a helmet, but you don't. Is that due to a difference in City and University policies?*

Beale: I have one, but it gets a little hot, so I don't wear it.

BF: *So safety is a cold weather consideration.*

Beale: Yes, unfortunately. Also, I've been riding for 1½ years, and I've only fallen once. I'm going to need it if I ever get hit by a car while chasing someone through the city. It's been pretty close.

BF: *So you can go off campus?*

Beale: My jurisdiction to initiate a stop extends a mile out, but I can chase anyone as far as I want, or until they wear me out!

BF: *Has that ever happened?*

Beale: No. I had one getaway once, but my partner got him when he got off his bike and ditched it, and started walking. He lost me when he went through two intersections full of traffic and two stop signs. I don't get paid enough to follow that.

BF: *That's understandable. Is the bike part of the patrol or your own?*

Beale: It's a university bike. We've got three 12.2's [Schwinn Le Tour] and two Continental 2s.

BF: *How do they hold up on duty?*

Beale: I've had mine worked on some. Just now my brakes have started squeaking.

John Wilson: I'm losing a bit of grip on my gears.

Beale: You use your bike all day long, unlike someone who rides to work and back. You're on it all the time, always on the brakes. You wear out the bearings, and the tires. I go through tires about every other month, and I put on the best tires the bike shop has.

BF: *When you look at stop sign violations, say at this particular spot, you obviously can't stop everybody. Do you just go for the more serious ones?*

Beale: You always have to stop the more serious ones. If people are riding through intersections very badly, you go for the ones riding no-handed. You stop them as close to the intersection as possible, and be highly visible. It reminds other people to stop. If they see someone getting a citation, it makes them aware that you're out there.

BF: *Are people starting to recognize you?*

> You stop them as close to the intersection as possible, and be highly visible. It reminds other people to stop.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Ahead

story and photos by John Williams

Wilson: They get used to seeing a helmet, after a while.

BF: *One city had a bike patrol where all the patrollers wore helmets, and anyone with a helmet had a positive effect on traffic.*

Beale: I've noticed that in the city. If you watch from a distance, and someone with a helmet comes through an intersection, people will stop as they go through.

Wilson: At this corner, though, we can both be out here working, and people will still fly right through. We stop them, and they say, "well, I looked, and it was safe." If they don't even see two cops sitting right there, it couldn't be that safe.

BF: *Do you get along well with the cyclists?*

Wilson: Sometimes it seems like it's us against the world. We had a guy get hostile last week.

Beale: He told us that he was holding back with everything he had, which was fortunate.

Wilson: We told him that there were reinforcements on the way.

Beale: We had a patrol car down the street.

BF: *Some patrols around the country don't have the authority to ticket, but you do.*

Beale: Yes. You have to be nice about writing citations, to an extent. With the University, anyone can be sent out to write non-moving citations. To pull people over, we have to be sworn; it is technically an arrest. *[Wilson leaves to stop a cyclist.]*

BF: *Do they count as moving violations?*

Beale: Not against your driving record, no.

BF: *So you've been doing this for 1½ years. Is it a good job? Do you like it?*

Beale: Well, it's great exercise, and you spend a lot of time outdoors. It's also nice to see some effect. The university staff thinks we're doing a great job—until we stop them. The students are less than super-friendly, but the most trouble I've had is with staff people. Especially tenured professors. They've been here so long; "do you know who I am?"

BF: *So you're not supposed to stop people because of who they are, right?*

Beale: That's the impression they like to present. "You know who *I* am?" It doesn't matter to me. Give me your driver's license, and I will. They don't take me to court as often as the students do, though.

BF: *You give citations to students, and they want to go to court and fight it?*

Beale: Sure, contest it, and subpoena me.

BF: *Any particular violations where they do that most?*

Beale: I've had a couple of stop signs and wrong sides, one wrong way through the circle, and several parking citations. I have one of those tomorrow, for a person who was parked in the middle of the sidewalk, blocking it. I don't know why they think they can contest it. It's their legal right, but they seldom have anything approaching a good defense. They try to present other mitigating circumstances, which doesn't change the basic offense. If I write someone for parking on the sidewalk at the hospital, and they tell me that they were taking in a friend who just got wiped out by a car, of course I'll take the citation back. They don't have to take me to court. But it's never been anything halfway decent that they've taken me in on. Usually, in a situation like this stop sign, it's fairly simple. "Did you make a complete stop?", the judge will ask. The person can't say yes; they can't win. It doesn't matter if it was clear, with nobody around for 100 miles, and they could see that far.

BF: *How many people patrol this campus, full-time?*

Beale: I'm the only sworn bicycle officer. My supervisor is a police officer; he's responsible for the paperwork, stolen bikes, correspondence with other departments in reference to bikes, and student complaints. We have a foot officer who can ride a bike. We do have three of the 12.2s, so we can have myself and two others all mounted. During special events like Picnic Day, the Whole Earth Festival, we'll have more mounted units.

BF: *Do you feel overworked? There are a lot of bikes around here.*

Beale: Yes, they are continuous. You do the best you can. Be as visible as possible; write the most serious violations you find. Hope you have an effect, keep in touch with the newspapers, try to gets lots of publicity, and work for support from the dorms. It's been pretty successful.

[Wilson returns]

Wilson: I've warned him not to run stop signs a couple of times now.

Beale: This time, it wasn't a warning.

Wilson: No. The last time I warned him, about five minutes later they had a report that matched his description; they took him off to jail.

BF: *I didn't think bicyclists were dangerous.*

Beale: They can be.

Wilson: I stopped a guy on Thursday, possible stolen bike. The registration came off the computer as hot, and as soon as it came back, they gave me the code for confidential information, which means that the next thing they're going to tell me is that it's hot. The guy had a bike chain in his hand, so as soon as the code came across, I just reached over and grabbed the bike chain.

You always have to stop the more serious ones.

continued

The same morning I stopped another guy, and was looking at his serial number. There were some indications that the bike could be a stolen one, so I asked him to show me his serial number. His hands started shaking, and the next thing I know, he's got his bike chain in his arm, trying to hide it from me. So I picked up my bike and held it up as a shield.

BF: *What do you look for in picking out a stolen bike?*

Wilson: No brakes. Many times, they strip the bike. Same with gears.

Beale: Stolen bikes aren't maintained as well. They figure that if it falls apart, they'll just steal another one.

Wilson: If they can't tell what brand it is. You ask, "is this your bike?" "Well, I'm not really sure. It's a friend's." "Do you know who owns it?" "A guy named Bill, I think." Then you start looking for a few other things. Sometimes you know the thieves; they've been good for it before. So you stop them, and run [a check on the bike]. Dave's lucky; he's got bike licensing; you can call in and find out who owns it. We get a lot more unlicensed ones in the city than he does, on campus. We can only cite them for being unlicensed.

BF: *I understand Proposition 13 had an effect on licensing.*

Wilson: We used to have 40 people a day come in to get licenses. The problem was, you had to put it on a computer, and it cost $7000 a year. When Proposition 13 went through, they just cut it.

Beale: That's another thing: our computer fees aren't so high. We use the University computer.

BF: *Couldn't you get into some time-sharing?*

Beale: I don't know—it may be difficult for an off-campus organization to use the University facilities.

Wilson: Also, patrolmen usually get along better than administrators. I look on Dave as an ally, while his lieutenant might say to mine, "keep your hands off my university." We have some people in our department who see a university cop in the city, and ask, "what's he doing out here?"

Beale: Another problem John has is people complaining to City Council. If he blows a stop sign chasing somebody, he's legally in the right, but he's going to catch a lot of flack if somebody doesn't like him. When I chase somebody, I don't see a stop sign or a pedestrian. I'm not going to hit anybody or cause any accidents, but I'm after them, just as if I were in a cruiser.

Wilson: My sargeant will tell them, "well, maybe he should have been a little more careful, but he was in pursuit." Then he'll turn around and tell me, "you did a good job." My supervisors have been really supportive. You have to be careful though; I've had some people get hostile. There were two days when I had to call for cover six times, on various things. You get into a lot of things in the city when you're on a bike; you break up fights, and sneak up on people. Calling for cover so often, somebody's going to get mad, but the sargeant chewed me out once for not calling sooner!

Learn how to deal with people...

BF: *Maybe they feel that way because you're out there on a bike, and they have the security of a car and other equipment.*

Beale: Yes, they do understand that we are, literally, chasing people. If you don't have a shroud of metal around you, and you go down, you're likely to get torn up, wearing shorts and short sleeves.

BF: *You must be pretty good at sprinting. That's what you do most of, isn't it?*

Wilson: Not too much downtown. When I get out a ways, I do. A lot of this is short sprints. If it's a long one, I'm in a pursuit, and I don't have that many. Most people know better.

Beale: They know that if they do get away from us, we'll get a patrol car after them.

Wilson: A lot of people have the idea of seeing how good they are; "I think I could outrun you." I say, "maybe you could, but can you outrun my radio?" They say, "oh, I think I could do that, too." "You're welcome to try, if you really think you can, but I'm going to take you to jail." I use a little psychology to talk them out of it.

Beale: Another thing people don't realize: if you do try to run away, even on a bike, you can go to jail, if that's how the officer feels about it. It's the difference between an infraction and a misdemeanor. For a misdemeanor, you get a citation, and go on your way. For an infraction, if it's serious enough—if you've gone through traffic and committed some more offenses, made a real hazard of yourself—maybe you need to think about it in jail.

Wilson: Have you written anybody for reckless yet?

Beale: Just the guy I took through the whole [expletive deleted] city. He had about eight violations, and we took him for reckless. I lost him when he went through two intersections, blowing stop signs here and there, with the streets full of traffic, cars skidding and swerving, and he went ripping on through. As I said, I don't get paid enough to follow him through that.

Wilson: You have to make decisions. If you really want to catch them, your adrenalin starts going, but once they start going through stop signs, if you have to start and stop again, you're losing time. You have to ask yourself, "is it worth it?" Two weeks ago, I had a kid who wouldn't stop. I pulled up beside him, and said there was no way he was going to get away from me. I got him to slow down, but he still wouldn't stop, and he was running stop signs. This was in the middle of junior high school traffic. Finally I said, "Either you stop, or I'll knock you off

BEST COPY AVAILABLE

BEST COPY AVAILABLE

your bike." He said, "No, you won't." I didn't knock him off, but I took him down off his bike. That's another situation when you have to decide what you're going to do.

Beale: How serious the violation is, if it's worth grabbing the guy and both of you going down. Usually, if they have a rear rack, I try to grab it and put on my brakes. But then I have only my front brake. The first time I did it, I grabbed the guy's rack, but I really didn't know what to do next. So I shook him up a little bit, and he put on the brakes. If he hadn't I probably would have let him drag me around until he got tired of it.

Wilson: That's what happened to me, when I grabbed the guy. I had him around the waist, and my bike was going down, which I knew it would, but I was wondering, "now what do I do?"

BF: *Perhaps some track riding would be good practice.*

Beale: Tracks scare me.

BF: *Really? All the contact, and the pushing and shoving?*

Beale: That, and the ground going by so fast.

BF: *So you guys have a good time out there, pulling over these easy-to-stop bicyclists, who never give you any trouble. Everyone's supportive, and loves the fact that you're out there doing something.*

Wilson: They wave to us as we ride past.

BF: *How many fingers?*

Wilson: I was telling Dave, I almost always have somebody hostile on Mondays. Today, everybody's been pretty cool. By about the middle of the week, they're pretty mellow, and they're just not paying attention; on Fridays, they're in too much of a hurry.

Beale: That says it all. Of course, during finals, nobody knows what city they're in.

Wilson: They're in a hurry, and they're not paying attention. You stop them, and they say, "Oh, I had this midterm."

Beale: Sometimes it takes a long time to get a citation written during finals. People aren't there, mentally. You talk to them, and they're trying to clear their heads of all these numbers and figures.

Wilson: And they say, "don't you think you can cut us a little slack during finals?" But running a stop sign can get you killed just as easily during finals as during any other time.

BF: *What is the worst violation that people do?*

Wilson: The worst one I've seen is running barricades on the railroad crossings. The gates come down, and they'll race the trains. I've seen it a couple of times, but I've always been on the wrong side of the tracks. Now, when I hear the bells start ringing, I head for the tracks. I'm going to catch somebody doing it someday, and give them a good lecture, and a ticket. Friday night we had a pedestrian killed there; she was torn to shreds. It really scares me that that'll happen to a bike. They get going fast, they hit the tracks and fall, and they're not going to get up.

Running a stop sign can get you killed just as easy during finals as during any other time.

BF: *Did you have anyone teaching you about bicycling when you took the job?*

Beale: No, they don't *know* anything about bicycling. When I got here, there hadn't been a bicycle officer for three years. They said, "There's your bicycles, here's a desk, and here's a ticket book. Go out and have a good time." I hadn't been on a bike since I was in junior high.

Wilson: I'd been working [regular] patrol, and on Thursday, I got called in. The lieutenant says, "we're going to put you on as interim bike officer; the last guy went to the Academy, so he's going to patrol." I worked patrol on Friday, and I rode with the guy who was bike officer to pick up some tips, but we were rather busy. Monday I started in, and that was it. It's weird; you don't really know how to handle the first few stops.

Beale: It's scary for the first couple of months. You pull people over, and really don't know what to expect. I had just gotten out of the military police corps...you realize fairly quickly that things are more mellow here, but when you're just starting, you don't know that. Of course, John just got off regular patrol, but then again, he was doing that at night.

Wilson: It's very different working bikes at night. I had one big giant guy tell me, "I'm not going to sign the ticket; what are you going to do?" I said, "I'll take you to jail if you don't sign it." I wrote a 19-year-old for possession of alcohol. I made a bike stop, he gets off, and puts his beer on the ground. Nobody said what to do if I stop a minor with alcohol. And I've broken up fights, just being on a bike and being quiet. I come along and see kids out fighting. With ten kids, what do you do? Let them fight? Ten 16-year-olds will jump all over you.

Beale: Five against five will turn to ten against one.

Wilson: Fortunately, I'd already dealt with them several times, individually. They all took off. But you sit on your bike across the street thinking, "what now?" "Come over here and I'll hit you with my cite book."

BF: *You could throw the bicycle at them.*

Wilson: That's a one-shot deal, though.

BF: *Yes, then they throw it back. Do you have any good advice for people about to start up a bike patrol?*

Wilson: Learn how to deal with people.

Beale: Yes, the psychology of it is very important.

Wilson: That also applies to warnings and citations, as well as those who get hostile. Lots of people you stop will immediately realize what they did, and feel bad about it. Others won't say a word, and you think they're being polite, but they're just simmering.

BF: *Is there a standard fine?*

Beale: It's set by court; a moving violation is not a bailable offense. That's the way you do it too, right, John?

Wilson: They can go in to post bail; it's not marked on the ticket. It's usually $5.

Beale: Don't they have to appear?

continued

Wilson: They have to contact the court.

Beale: Mine have to appear before the magistrate. They ask me how much the bail is, and I tell them they have to contact the court about it.

Wilson: The court has a $5 fine for just about everything, unless it's something like reckless. Bike lights is $10, or $5 with proof of correction. If they go in to prove that they got a light, they still have to pay $5. We've had a problem with writing fix-it tickets like that; it's a good idea, but people ignore it. I write lots of fix-it tickets for brakes.

Beale: I stopped writing them because I wasn't getting results.

Wilson: I'll start going through the tickets in a couple of weeks, and see how many came in.

Beale: If they're still picking them up, maybe I'll start writing them again. For the first few months I was here, I was spread so thin that there was no noticeable effect. One person, with 17,000 students, all on bikes. They'd been left alone for two years, and suddenly someone starts coming up and tapping them on the shoulder, "excuse me..."

BF: *Do you have particular spots that are the best places to work?*

Beale: This is probably the best spot on campus.

Wilson: Just sitting here, people might run it, but they'll say, "oh, the bike cop is here."

Beale: But they see us writing someone else, and go ahead and run it, and don't get stopped.

Wilson: We started working together last week. It was so satisfying; I'd stop one, and all the people running the stop signs would say, "ah, the bike cop is busy." Then Dave would come up behind and snag them. About that time I'd finish mine, and come back; it was back and forth.

Beale: We thought we'd get to talk, but it didn't work out that way.

Wilson: We figured we'd write about as many as just one of us would, but I wrote 9.

For the first few months I was here, I was spread so thin that there was no noticeable effect. One person, with 17,000 students, all on bikes.

Beale: I wrote 7, in 45 minutes. Then we went into the city, and John wrote most of those.

BF: *How is your position funded?*

Beale: Through the sale of bike licenses, and fines for impounded bikes. We charge $4, going up to $5 soon, for an illegally-parked bike.

Wilson: I'm funded straight through the city's traffic division. What I'd like to see is myself on full-time and another person on part-time. We could have two people on afternoons, and hit the real hot spots. One person all day; it would leave enough time to work stolen bike programs, statistics, and such. I'm spread so thin, I don't even have time to work on my bike.

Beal: You have to make time, when it's falling apart.

Wilson: Yes. It was really bad last week, so on my day off I took it to the bike shop and asked them to do a rush job. I just don't have time to go through the manual and tinker with it.

Beale: We hope to have four nine-month people, like students, or regular, part-time employees; two during the day, and two during the swing shift. Two full-time bike officers, one for the morning and one for the swing shift, to supervise them, and a police officer in charge of the whole program. We're trying to get some funding for that.

We're running a major survey right now. I counted all the bikes parked overnight, and we had 35 people out one day counting all the bikes parked during class, then running out to designated intersections and counting how many bikes cross a path in different directions. Then during a couple of class breaks, we had people at the four major intersections in the center of campus, with cameras and video tape equipment. We hope to have a lot of material to present to the state.

BF: *What's the worst bike accident you've seen?*

Wilson: At the corner of California Street, where it goes to the bike path. People cut across there all the time. A guy cut across, and hit another one head-on. One flew through the air, and hit a tree.

I'm trying to get a scheme to get Dave to go out to the junior high with me. He'd love it, and it would blow their minds. The kids don't like to see their friends getting tickets, so when they get stopped, the rest of them ride all around me and try to get me to chase after them. It's be nice to have another officer there.

BF: *I've seen pictures of bicycle police with guns on their hips. I don't see any guns on you guys.*

Beale: The University is trying to project a different image.

Wilson: The City may go to that, after I graduate from the Academy. Their main concern, though, is image. Also, if I'm carrying a gun, I'll start getting involved in other things besides licenses.

Beale: They expect you to be there if something goes down, but they don't want you to be starting anything.

Wilson: Yes, they don't expect you to let them know that you're there. We could use somebody on a bicycle, doing a regular patrol, but *this* is a non-hazardous position. A couple of times, I've been fairly far away from things, like bike wrecks, but I've been the first unit on the scene. One day I responded to an accident call about 17 blocks away; we had a unit going Code 3 [with lights and siren—ed.] and I beat him.

Beale: I'm routinely the first unit on the scene. The cars have to stay on the streets, but the University is veined with bike paths. I can go between buildings, down ramps, through hallways, practically.

Wilson: If you had a light and could warn people you were coming, you wouldn't have to stop for lights, and could go even faster. I can get going, and I say, "police officer, coming through"; people look around, but by that time, I'm gone. If I had a siren, I could clear them out of the way immediately.

The guy who was bike cop before me is trying to get me fixed up with an airhorn. He has one on his bike. Keeps wanting me to buy his racing bike, too. One time he broke a pedal, and it was about $60. Since it's his bike, the department won't pay for it. That's practically half your salary, which is why I ride the City bike. If it gets wrecked, they pay for it.

Beale: I don't worry about that. I throw it in the truck, take it to the bike shop, and have them fix it.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Wilson: You've got back-up bikes, too.

BF: *What do you do when it rains?*

Beale: Statistics. Fortunately, it hasn't rained that much. I almost miss it, when it's raining.

BF: *That's a good reason to get some fenders, and other rain equipment.*

Beale: Eight hours in the rain, even with fenders...

Wilson: I did work one day when it was raining. It was interesting because people didn't even look for traffic lights or stop signs—they just cruised on through, with their heads down. It wasn't too bad; I sat under a bank awning right at an intersection. Got soaked citing them, though.

Beale: "You thought I was too smart to be out here in the rain! Wrong!"

BF: *Visiting Davis in the past, I used to see a high proportion of no-handed cyclists—like that group there, with 2 out of 4 riding without hands.*

Beale: A good half of the bikes out are riding no handed.

BF: *That could be a helpful indication—if someone's coming up to a stop sign riding no-handed, it's time to put your feet in the clips.*

Wilson: If you have them. I was going to bring that up today; "isn't it about time you came up with those toeclips?"

BF: *Will your pedals accept them?*

Wilson: No, but we confiscate bikes. I'm waiting for a nice stolen bike to come in, and we can't find the owner.

Beale: Or find a thief with a whole garage full of parts.

BF: *How often do you run a bike auction?*

Wilson: We have them at least twice a year.

Beale: The city usually tries to beat us by a week. It doesn't matter, though; we sell them all anyway.

Wilson: Every auction, it seems like we make a lot more than the last time. The average bike sells for $40 now, but some are clunkers.

Beale: Schwinn Varsitys seem to be 90% of the stolen bikes. They go for about $40-60, regardless of how much work they need. It's amazing that a bike in terrible riding condition with a nice paint job will go for so much, compared to a bike with alloy parts and a rusty or scratched frame. They won't buy it.

Wilson: A lot of people just want something to get back and forth to work on that is semi-respectable. You see professors out here on real clunkers, which they must had had for ten years.

[Radio message]

Beale: Well, they want me to work! I have a bike to release; she must be mad.

Wilson: Some people we stop say, "you can't do this; I race bikes." "Oh, really? You don't look in that good a shape. Did you go on the [Davis] Double Century?" "Are you kidding? That's too far!" Only once have I ever stopped anybody who even looked like a racer. I don't believe he was, though, just that he had the gear. Bought the clothes and the bike.

BF: *That means they race a track.*

Wilson: No, it means they race from here to home.

Beale: That sounds like me. I stay on the street, though; bike paths are dangerous.

BF: *That's heresy around here.*

Wilson: Bike paths get people killed. Actually, it's not where there are bike paths, it's where they end.

Beale: Sometimes with posts, with reflectors on them.

Wilson: We've got one that hits Highway 113 as it bends, right at the on-ramp. The path just ends. We used to have bike wrecks there, because people'll be trying to get across, and the drivers don't know there's a path there. Bikes are just dumped onto the ramp.

Beale: We have a path that empties onto a street, and across the street is a sidewalk going across and up. In the dark, it looks like the path continues; but the sidewalk leads up to a building. Every so often, we have people take a fall. They get on the street, hit the curb on the other side, and go flying. One guy was lucky—he only got badly bruised, but his bike was mangled. Both wheels were demolished, with spokes going in all directions, and the front fork was bent up, back towards the pedals. The guy was hardly hurt. He went into the grass and rolled.

Wilson: Bike wrecks are funny. Sometimes you see people hit, and you think, "oh my god, they're dead." You look, and they get up without a scratch, and nothing's happened to their bike. Other times, their wheels are pretzeled, their frames are bent.

BF: *What are the Davis bike laws like?*

Wilson: They are the state laws plus the city codes.

Beale: Riding on the sidewalk.

Wilson: You like that one, do you?

Beale: I will. I haven't written anybody for it yet.

Wilson: I assume this varies in the central traffic district. I'll have to look up what that includes.

Beale: Is that spelled out, or do you use your discretion?

Wilson: You can say it's a heavily-travelled area. If they hit somebody, or come close, just write them.

Beale: Ours says a sidewalk is anything that has a street or a bike path parallel to it. There are so many bike paths that are cement, and others that are asphalt; that's not a good determinant.

BF: *We have a local ordinance, which, if it were contested by the state, would be thrown out. It lets you get by with one of those little leg-lights, as opposed to the bike-mounted ones.*

Beale: State law doesn't allow those; they can't be seen from both sides.

Wilson: And you can't see it from 300 feet.

Beale: They are good because they show motion; your pedalling shows up.

Wilson: They're good for on the leg, as long as you have another light, but they're not good by themselves. (To Beale) You going to be back this way later?

Beale: As soon as I release this person's bike, I could come back out. Give me a call later.

Wilson: OK, if I can pick it up. This radio doesn't work so well.

Beale: OK. See you later. *[Leaves]*

BF: *Do the cyclists you stop consciously break the laws?*

One day I responded to a call 17 blocks away; we had a unit going Code 3—and I beat him.

continued

Wilson: I always ask, "can you tell me what you just did wrong?" Sometimes they'll tell me things that I didn't even see, that I hadn't planned to stop them for. Sometimes they'll miss the big one, like the stop sign, but they usually know. I'll say, "how about that stop sign back there?" "Oh, that too. I forgot about that." They know.

There are very few people in Davis who can honestly say, "I didn't know bikes had to stop for stop signs." If they *do* they're new here. A lot of people who come here don't know that we enforce, but they know they should have stopped. The first week of school, you get a lot of "wow—look at that! They've got cops on bikes here!" In the fall, we try not to ticket so much because there are so many things people don't know. All the new students aren't aware that they have to stop. Unless it's really blatant, or they almost hit somebody, we usually don't cite them for the first week or so.

BF: *Maybe it's because I've looked at cyclists in so many different communities for so long, but it seems that nowadays, Davis looks better than it has—and also better than a lot of other towns—in terms of cyclist behavior, knowing how to make left turns, and such. You probably see the other side of the problem, with so many people to stop.*

Wilson: The main purpose of my job is education. I've written 13 tickets today since 1:30, and I hit the street at 11, with a half-hour for lunch, and another out in west Davis looking for some kids, when I didn't write anybody. Most of these are stop sign violations, and I've also got one wrong side of the street and one no brakes. When I worked no light at night, I wrote 9 or 10 in an hour. The only reason I didn't write more is that I can't write any faster; I've had them stacked up 4 and 5 deep waiting for their tickets.

BF: *In our town, the bike cop started writing citations for no lights at night, and in the next few days there was an incredible rush on lights at the bike shops. Wiped them out completely. Do you have that kind of effect here?*

Wilson: Not so much now, because the shops are ready for it. Very few people don't know that they have to have lights; they just don't have them. Sometimes they have dead batteries or no bulb, and they think they can get by. You can get killed just as easily with no battery: the light doesn't do you any good. It's not even a reflector; taking the light off and putting a reflector on the front would do you more good. Riding on some of our bike paths where it gets very dark, I've had people get within ten feet of me before realizing they were there.

BF: *They could be going pretty fast, too. Do you have any problem with security on your paths? Some communities with remote, rustic-looking bike paths have trouble with assaults.*

> The first week of school, you get a lot of "wow—look at that! They've got cops on bikes here!"

> I'm otherwise known as Captain Pigcycle....

Wilson: There's some. Most of our rapes are residential break-ins, though. We had one last summer when someone was walking home, but we don't get too many involving bikes. If a person's determined to get past, and is moving pretty fast on a bike, it's hard to stop them. In that sort of situation, most women wouldn't stop.

That's one problem I have at night—trying to stop people. They look at me, look back, look at me again, "oh, he's the bike cop," then they figure it out. Also, I have to wear a helmet, which they see. In daylight, I've had only one person look back. I asked him to pull over, and he said, "who are you?" "I'm a police officer; you'd better pull your bike over now." "Well, show me your badge." "You pull over and I'll show you anything you want."

BF: *How did you and Dave start working together?*

Wilson: That's interesting; I think it's the first time we've had direct cooperation between two bike officers. We've always been aware of each other, and talked to and seen each other. Friday, I went over to the university and was talking to his boss, who I know from patrol work. Dave came by, and we got to talking, and he came up with the idea of riding together for a while. Now we're going to make it a habit to stop people out here. You saw how busy we were. We were letting people off, too. I thought we'd get here and it would be like two doing the work of one, but it wasn't at all.

BF: *No, it's just that much more work to do; there's plenty of it there for both of you.*

Wilson: Yes. You saw how much tunnel vision people have. As I said, we set ourselves up as visibly as we can, with two cops, and people still run it fast. I stopped one guy today, and noticed him coming back later. He stopped, pretty much, but it was not a great stop. I asked him, "how long have you been in Davis?" He said, "Two years." I said, "OK, I can expect you to be stopping at every single stop sign, because you should know where they all are by now." He said, "Yeah, I know where they're at." Next time he came past, it was ticket time again! Some people just have trouble getting it to sink in.

(Editors' note: Just before our deadline, John Wilson provided this update.)

Dave Beale resigned shortly after the interview (I don't think it was the cause). His position has since been filled by Mike Thompson, a very able officer who previously served as a dispatcher for the University Police Department.

I am continuing as the City of Davis Bicycle Enforcement Officer (otherwise known as Captain Pigcycle). I've been doing this for almost a year now, and still enjoy it, for the most part. I've changed bikes, and now ride a Raleigh Super Grand Prix; it had been stripped and abandoned originally. The University officers continue to ride new Schwinn Super Le Tour 12.2s. However, we still rely on conditioning to catch violators riding better bikes. I still haven't ever lost a pursuit (although I don't want that to sound like a challenge to anyone who wants to try).

Our enforcement efforts at Third and A Streets lead to the placement of a homemade sign stating "Caution: Bike Cops Ahead." It would seem that our high visibility enforcement tactics do work.

This alliance between City and University Bike Cops continues as it did when the interview was done. Although the University guys spend more time impounding bikes that are blocking entrances to buildings than they do writing tickets, we still manage to exchange information, back each other up, and occasionally ride together, especially at the beginning of each school quarter. Remember, Davis is unique in that each new quarter we have thousands of people unused to riding in a city where there are more bikes than cars. **BF**

BEST COPY AVAILABLE

ROLE OF THE BICYCLE OFFICER

ATTACHMENT B

"DO-IT-YOURSELF ENFORCEMENT
PROGRAM EXAM"

*Evaluating Local Enforcement Needs No two communities have the same enforcement need. Unique traffic systems, population, bicycle usage, motorist attitudes, bicyclist attitudes, community leadership, local politics, funding and even climate all enter into the final decision on how to approach a local enforcement plan. One of the first steps we recommend is that you use the checklist below to evaluate your unique community enforcement needs.

DO-IT-YOURSELF ENFORCEMENT PROGRAM EXAM

Attitudes and Priorites	Excellent	Average	Poor
*Community leaders are open to innovative programs	( )	( )	( )
*Community leaders have deep involvement and personal interest	( )	( )	( )
*Commitment to financial support	( )	( )	( )
*Judicial support	( )	( )	( )
*Legislative support	( )	( )	( )
*Public accepts need for bicycle enforcement	( )	( )	( )
*Police officers accept need for program	( )	( )	( )
*Local press responsive/supportive	( )	( )	( )

Bicycle Usage

*Has your community witnessed a significant growth of bicycle usage during the past ten years ______YES _____NO

*Is this increased usage confined to certain sections of the community such as near college campuses, in recreation areas, etc.? If so, list areas

____

____

____

*Source: Darago, Bicycle Safety Atlas, 1978.

*How many months out of the year is bicycle usage
high? ( ) 2-4 months only ( ) 5-8 months ( ) Over 8 mont

*If use is seasonal, when does peak hit? ________

*Would a seasonal enforcement program work
in your community? ________YES ________NO

*Is your bicycling group uniform (e.g. mostly students) or mixed?
List groups and percentages Under 13 ___% Teenagers ___%

College ___% Adults ___%

*How serious is your safety problem... have bicyclists
been seriously injured or killed? If so, how many
per year____ Is this number increasing ____YES ____NO

*What are the main violations (List those causing the
greatest conflict, and accidents)________ ________ ________

Bicyclist/Motorist Attitudes

*Do bicyclists significantly impede traffic flow _____ YES _____N

*Do motorists show courtesy to bicyclists sharing roadway
________Excellent ________Fair ________Poor

*Do bicyclists show courtesy to motorists sharing roadway
________Excellent ________Fair ________Poor

*Do bicyclists normally ride in a predictable pattern
consistent with safe usage ______YES ______NO

Department Constraints

*Over the past five years what has been the pattern of
department priorities toward Traffic Enforcement Programs
________Increase ________Steady ________Decrease

*How much latitude does your agency have to develop
its own programs ________Low ________Medium ________High

*Does your department have sufficient funding to take on a
program. If so, how many dollars can be allocated? $________

*Is the allocation of staff time and funds currently consistent
with safety requirements and needs? _____YES _____NO
If not, what changes should be made?________

*Does your agency have a positive public image? _____YES _____N

*Does your agency have a public relations program...If so,
is it effective ____Low ____Medium ____High

*Using a public relations approach, would initiation of a bicycle enforcement program increase the positive image of your agency? ____YES ____NO

Local Development Steps

*Local bicycling/motor vehicle mix laws have been updated within the past five years ____YES ____NO

*Laws are comprehensive, consistent, fair, adequate ___YES ____N

*Laws are uniform with ____County ____State ____Uniform Vehicle Code

*Agency policy guidelines on bicycling have been developed/ updated during the last five years ____YES ____NO

*Does your agency training academy include a section on the unique needs and problems of bicyclists ____YES ____NO

*Has your agency presented materials or held a workshop session for its officers and staff relating the needs of bicyclists ____YES ____NO

*Are your accident investigation forms adequate for reporting bicycle accidents ____YES ____NO

*If so, how are these statistics used within your community ____

*Agency now has an adequate enforcement program ____YES ____NO

Evaluation Summary. By completing the above examination you may now have a clearer idea of the many factors leading toward an effective community enforcement program. As a point of emphasis, you cannot compare your program with a neighboring community. Your needs are unique. We recommend that you use the above evaluation as a guide to help in the development of a detailed work plan for an enforcement program. As you can see, there are many elements. Some of the most important steps require little new funding. Others must be budgeted over a two to five year period.

ROLE OF THE BICYCLE OFFICER

ATTACHMENT C

SANTA BARBARA POLICE
BICYCLE ENFORCEMENT SURVEY

BICYCLE ENFORCEMENT SURVEY*

1. How many years have you worked as a law enforcement officer assigned to patrol duties?

   Years ____________ Months ___________

2. Does your agency currently have a bicycle safety program which is presented to the public?

   Yes _________ No ___________ Unknown ______________

3. To your knowledge, what information and concepts are presented in your agency's bicycle safety program?

4. With regard to your patrol experience, how would you evaluate the effectiveness of your agency's bicycle safety program?

   Very effective ___ Generally effective ____ Not effective ____

5. What are the reasons that make your agency's bicycle safety program effective or ineffective?

6. What changes would you suggest be made to your agency's bicycle safety program?

---

*Source: University of California at Santa Barbara Police Department, Santa Barbara County Bicycle Safety Project, 1979.

7. To your knowledge, what bicycle traffic violations account for the majority of bicycle accidents? (Please list violations in order of their severity)

a. ____________________
b. ____________________
c. ____________________
d. ____________________
e. ____________________
f. ____________________
g. ____________________
h. ____________________
i. ____________________
j. ____________________

8. Has your agency presented you with information or training on enforcement of bicycle traffic laws or bicycle safety information which you could apply in your patrol duties?

Yes ______ No ______
Type of information or training: ____________________
____

9. When contacting a bicycle traffic law violator do you attempt to inform the violator on bicycle safety?

Yes ______ No ______

10. Do you actively attempt to enforce bicycle traffic law violations on a daily basis?

Yes ______ No ______

11. Generally, what are your reasons for enforcing or not enforcing bicycle traffic laws?

12. How many citations do you issue to bicyclists for traffic violations during an average week?

______

13. How many warnings do you issue during an average week?

______

14. Do you think that there is a bicycle accident problem within your police jurisdiction?

Yes ______ No ______ Unknown ______

REFERENCES

Baldwin, L. Enforcement: Programs and Problems in Four Communities. Bicycle Forum, No. 4, Fall 1979, pp. 20-25.

Benages, C. J. Illinois Traffic Safety Programs Report of Evaluation or Assessment. Bicycle Rules Enforcement Program, Skokie, Illinois. Springfield: Illinois Department of Transportation, Division of Traffic Safety, January 1978.

Bicycle Federation. Pro-Bike '80. Proceedings of the First National Conference for Bicycle Program Specialists. Conference held November 9-12, 1980 in Asheville, North Carolina. Washington, D.C.: The Bicycle Federation, 1981.

Blomberg, R.D. and Hale, A. Identification and Development of Countermeasures for Bicyclist/Motor Vehicle Problem Types (National Highway Traffic Safety Administration, Contract No. DOT-HS-7-01726, Preliminary Draft). Darien, Connecticut: Dunlap and Associates, Inc., August 1981.

California Highway Patrol. California Bicycle Accidents - Their Relationship to Enforcement and Equipment Factors. Sacramento: Author, November 1974.

Cardarella, S. and Rankin, R. Bike Patrols Peddling Safety. Madison, Wisconsin: Madison Police Department Safety Education Office, Fall 1980.

Concord Police Department. The Concord Bicycle Traffic Court. (pp. 20-43 of a larger report) Concord, California: Author (n.d.).

Concord Police Department Bicycle Safety Unit. Officer Friendly Presents. Concord, California: Author (n.d.).

Connelly, M.D. and Lofton, E. R. North Carolina Bicycle Registration Study. Report prepared for the North Carolina Department of Transportation Bicycle Program, November 1978.

Cranford Police Department. Bicycle Safety Alert Program. Cranford, New Jersey: Author (n.d.).

Cross, K.D. Aids to Bike Safety Education Program Planning. Based on remarks to the Bike-Ed Conference, May 5, 1977, in Washington, D.C. Timonium, Maryland: Milner-Fenwick, Inc., (n.d.).

Cross, K.D. Bicycle Safety Education - Facts and Issues. Falls Church, Virginia: AAA Foundation for Traffic Safety, August 1978.

Cross, K.D. and Fisher, G. A Study of Bicycle/Motor Vehicle Accidents: Identification of Problem Types and Countermeasure Approaches. Volume I. Washington, D.C.: National Highway Traffic Safety Administration, September 1977. (Contract No. DOT-HS-4-00982, Ref. PB 282 280).

Darago, V.S. (Ed.). Bicycle Safety Atlas. Washington, D.C.: Urban Scientific and Educational Research, Inc., January 1978.

Darago, V.S. *Regional Workshops on Bicycle Safety: Presentations, Participation Problems, Programs and Ideas, Recommendations:* Washington, D.C.: Urban Scientific and Educational Research, Inc., September 1978. (Contract No. DOT HS-7-01798).

Davis, J.E. *Richfield Public Safety Department Bicycle Safety Program.* Richfield, Minnesota: Department of Public Safety, (n.d.).

DeHart, G., Ostrowski, M. and Sokal, D. *Bicycles in Maryland: Legal Issues, Bicycle Report No.1.* Baltimore, Maryland: Regional Planning Council, February 1978. (PB 297 276).

DeLeuw, Cather & Company, August 1972. *Pedestrian and Bicycle Safety.* Report prepared for the City of Pacifica, California. San Francisco: Author, August 1972.

Des Plaines Police Department. *Proposal for Organization and Function of Bicycle Safety Program,* (n.d.).

Dunlap and Associates. *A Fourth Grade Course in Bicycle Driver Education - Course Guide.* (National Highway Traffic Safety Administration Contract No. DOT-HS-7-01726). Darien, Connecticut: Author, June 1981.

Dunlap and Associates. *A Course in Bicycle Driver Education - Teacher Lesson Plans* (National Highway Traffic Safety Administration Contract No. DOT-HS-7-01726). Darien: Connecticut: Author, June 1981.

Dunlap and Associates. *Your Bicycle Safety Workbook* (National Highway Traffic Safety Administration Contract No. DOT-HS-7-01726). Darien, Connecticut: Author, (n.d.).

English, J. *Current Issues in the Application of Traffic Laws and Ordinances to Bicycles.* Proceedings of the First National Conference for Bicycle Program Specialists (PRO BIKE 80) coordinated by the Bicycle Federation, Washington, D.C., 1981, pp. 54-58.

Florida Department of Transportation. *State Transportation Plan: Bicycle Element Highlights.* Tallahassee: Author, 1980.

Forester, J. *Effective Cycling.* Sunnyvale, California: Custom Cycle Fitments. 1978.

Geelong Bikeplan. *Bicycle Enforcement.* Technical Bulletin 4. Geelong, Victoria, Australia: Author, August 1980. (ISBN-0-7241-2323-7).

Hastings Police Department. *Summary. Hastings Bicycle-Pedestrian Safety Program.* Hastings, Minnesota Police Department, 1980.

Henszey, B.N. *Bicycles: A Need for Comprehensive Regulation.* *Traffic Quarterly,* 31(1), 1977, pp. 155-169.

Hunter, W.W., Cole, D.G. and Leggett, E.C. *An Analysis of Bicycle Accidents in North Carolina.* Chapel Hill: University of North Carolina Highway Safety Research Center, October 1978.

Hurley, J.L. and Thompson, R.L. Model Programs in Pedestrian and Bicycle Safety for Wisconsin Communities. Madison, Wisconsin: Division of Highway Safety Coordination, January 1973.

Indiana Department of Traffic Safety and Vehicle Inspection. Bicycle Safety Manual. Indianapolis: Indiana Department of Traffic Safety and Vehicle Inspection, (n.d.).

Kearney, E. and English, J. The Cyclist and the Code. Interview published in Bicycle Forum, No. 4, Fall 1979, pp. 14-19.

Madison Police Department. Pedestrian - Bicycle Monitor Program Report. Madison, Wisconsin: Madison Police Department Safety Education Unit, August 1981.

Mayo, M.F. Bicycling and Air Quality Information Document. Report prepared for the U.S. Environmental Protection Agency, September 1979. (EPA Contract No. 68-01-4946).

Minnesota 4-H Youth Development Office. Bicycle Safety: A Community Planning Kit. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

Minnesota 4-H Youth Development Office. Bike Patrol Training Manual. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

Minnesota 4-H Youth Development Office. Bike Safety Instructor's Guide. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, (n.d.).

National Highway Traffic Safety Administration. Another Way to Love Your Children. (Contract No. DOT-HS-7-01726). Washington, D.C.: Author, (n.d.).

National Highway Traffic Safety Administration. More Bicycles More Accidents? (Contract No. DOT-HS-7-01726). Washington, D.C.: Author, (n.d.).

National Highway Traffic Safety Administration. Pedestrian and Bicycle Safety Study: Highway Safety Act of 1973 (Section 214). Washington, D.C.: U.S. Department of Transportation, March 1975. (DOT-HS-801-383).

The National Safety Council. Indiana Bicycle Safety Program Guide. Report prepared for the Indiana Governor's Highway Safety Program, (n.d.).

North Carolina Department of Transportation. North Carolina Traffic Accident Facts, 1980. Raleigh: North Carolina Division of Motor Vehicles, 1981.

North Carolina Division of Motor Vehicles. Motor Vehicle Laws of North Carolina. Charlottesville, Virginia: The Michie Company, 1980.

Peaslee, C. and Cleckner, R.M. 20 Questions on the Minnesota Bicycle Licensing System. Arlington Heights, Illinois: Bicycle Manufacturers Association of America Inc., (n.d.).

Pelz, D.B. Bicycle Programs: City of Davis. Davis City Council, (n.d.).

Popish, L.N. and Lytel, R.G. A Study of Bicycle-Motor Vehicle Accidents. Report prepared for the City of Santa Barbara, California, June 1973.

A Proposal for a Three-Phase Bicycle Safety Program in the City of Yourtown. (Copy from N.C. DOT Bicycle Program), (n.d.).

Santa Barbara Department of Public Works. Bicycle Safety: A Program of Implementation and Study. Author, January 1975.

Santa Barbara Police Department. Bicycle Enforcement Program. Report prepared for the California Office of Traffic Safety, October 1973.

Scheskie, J.R. and Neil, R. Proposal for Organization and Function of Bicycle Safety Program. Des Paines, Illinois Police Department, 1972.

Sidhu, C.S., O'Brien, J.P. and Berroyer, C.J. Illinois Bicycle Safety Program Evaluation Report (Draft Copy). Springfield: Illinois Department of Transportation, Division of Traffic Safety, October 1980.

Temple City Unified School District. Pedestrian-Bicycle Safety Education and Enforcement Project. Temple City, California: Author, June 1972.

University of California at Santa Barbara Police Department. Santa Barbara County Bicycle Safety Project. Report prepared for the California Office of Traffic Safety, October 1979.

U.S. Department of Transportation and U.S. Consumer Product Safety Commission. Bicycle Safety Education: A Guide to Resources and Materials. Report from Bike Ed '77, A National Bicycle Safety Education Conference, June 1977. (Contract No. CPSC-C-77-0027).

U.S. Department of Transportation and U.S. Consumer Product Safety Commission. Bike Ed '77: A Conference Report. Conference held May 4-6, 1977, in Washington, D.C. (Contract No. CPSC-C-77-0027).

U.S. Department of Transportation and U.S. Department of the Interior. Bicycles USA Conference Proceedings. Conference held May 7-8, 1973 in Cambridge, Massachusetts.

Wagner, S. 1980 Community Bicycle Safety Program: Final Report. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, 4-H Youth Development Office, January 1981.

Wagner, S. 1979 Community Bike Safety Project Report. St. Paul, Minnesota: University of Minnesota Agricultural Extension Service, 4-H Youth Development Office, October 1979.

Wigan, M.R. Enforcement of Bicycle Laws and Ordinances. Internal Report AIR 812-8. Vermont South, Victoria: Australian Road Research Board, March 1980.

Wisconsin Council on Traffic Law Enforcement. Model Policy and Procedure Guidelines. Madison, Wisconsin: Division of Highway Safety Coordination, (n.d.).

ORGANIZATIONS

Within North Carolina, the two agencies that can provide the most aid to any community embarking on a bicycle law enforcement program are the North Carolina Department of Transportation Bicycle Program and the University of North Carolina Highway Safety Research Center. On the following pages are short descriptions of the two agencies, including ways in which they might be used as resources.

The North Carolina Department of Transportation Bicycle Program

In January, 1974, the North Carolina Bicycle and Bikeways Program was created within the North Carolina Department of Transportation and Highway Safety. The Bicycle Program (BP), following the outline of the Bicycle and Bikeways Act, is responsible for all aspects of bicycle concerns in the state. The BP assists local areas in the development and construction of local bike routes along with developing a statewide bikeway system. The BP has published policies, procedures, and standards for bicycle programming and has developed bikeway demonstration projects and safety training programs. The BP is also responsible for approving any bicycling event held on state-maintained roads. The BP services are administered by a three-person staff. The following publications and services are available.

PROGRAMMING GUIDES

ANALYSIS OF EXISTING BICYCLE FACILITIES IN NC: A description and analysis of the various bicycle facility treatments at the local level throughout the state. All types of bicycle facility treatments (bikeways, bikelanes and bike routes) are studied. (1981)

BICYCLE LAW: The result of a two-day workshop on bicycle law in the state. This document studies most aspects of the NC vehicle law and its relationship to the bicycle. (1978)

BICYCLE PARKING: A study of bicycle parking facilities applicable to government or business organizations. A detailed appendix of parking facility types is included. Guidelines for implementation are suggested. (1979)

BICYCLE SAFETY CITIES: A report on eight demonstration bicycle safety programs in the state, complete with an evaluation of the successes and failures of these efforts. (1978)

CHARACTERISTICS OF THE ADULT NORTH CAROLINIAN WHO USES A BICYCLE REGULARLY: An analysis of a survey of avid cyclists in the state complete with a comparison to a national study of the same character. (1977)

CITIZEN PARTICIPATION IN BICYCLE PROGRAMMING: A report on a two-day workshop where bicyclists and citizens gathered to study the various approaches to bicycle programming and government involvement. An excellent guide for citizens groups who desire to initiate programs in bicycle safety. (1979)

NC REGISTRATION STUDY: An analysis of the need for bicycle registration in the state and three alternatives for approaching bicycle registration programming. (1978)

NC FACILITY AND PROGRAM HANDBOOK: A manual providing the details on the structuring of local bicycle programs and the implementation of bicycle facility treatments, (bikeways, bikelanes and bike routes). (1975)

THE BICYCLE PUZZLE: PUTTING THE PIECES TOGETHER: The manual used in a series of bicycle facility design workshops held in the state for local planners, engineers and designers. It details many of the problems confronted in the provision of bicycle facilities, provides the proper guidelines for facility implementation and deals with the problems in preliminary planning and post evaluation. (1979)

MYTHS AND ERRORS: A booklet that provides a useful checklist of common errors and myths that plague many bicycle planning documents.

TOURING SERVICE

THE BICYCLE TOURING SERVICE is designed to aid people who are interested in traveling in North Carolina by bicycle. The Bicycle Program can assist with route selection and offer advice on preparing properly for the trip. The assistance in route selection comes in two forms:

BICYCLING HIGHWAYS: North Carolina Bicycling Highways are a statewide system of bicycle routes along the extensive primary and secondary highway system. The Bicycle Program has mapped out over 5,000 miles of road in the state specifically for bicycles because of their combined scenic beauty and low traffic density. There are several different routes with bicycle oriented narratives for each route.

SPECIAL ROUTE SELECTION: The Bicycle Program also provides special help for those cyclists who choose to create their own route which involves travel elsewhere than on the mapped routes.

SAFETY EDUCATION PROGRAM

THE BICYCLE SAFETY EDUCATION PROGRAM is one tool the Bicycle Program is using to make North Carolina roads a safer place to bicycle. The Bicycle Program wants more people to become aware of the growing number of bicyclists taking to the roads and conscious of the responsibility this places on the motorist as well as the cyclist. The following publications have been developed to assist:

ADULT CYCLING: A curriculum guide for a ten week, three hour per session course on effective cycling designed to be offered through continuing education facilities. This guide is presented in a manner that allows for the primary instructor to be an experienced cyclist/citizen.

BICYCLES IN TRAFFIC: A supplement to the States Driver Education Program that intentionally views the bicyclist through the windshield. This supplement was adopted so that an understanding of bicycling will be basic to the future driving population.

BICYCLES SKILLS TEST MANUAL: A manual that treats Bike Rodeos as more than an act of community participation, but a serious exercise to inspect, train and teach young bicyclists skills for safety on the streets and highways.

PEDAL POWER CAMP CURRICULUM GUIDE: A guide for developing a longer run training program for young bicyclists with emphasis on bicycle awareness and riding experience. This guide is structured to be incorporated into the regular planned activities of most camp experiences.

MEDIA SPOTS: Ten television and ten radio spots are available for use in local areas. These spots are unique to North Carolina and deal with different safety messages for bicyclists and motorists.

POSTERS: Eleven posters are available for distribution through the Bicycle Program office. The following topics are included:

A) Share the Road
B) Be Seen at Night
C) Roadside Hazards
D) Health and Recreation
E) History of Bicycling
F) Left Turns
G) 100% Natural
H) Bicycle Fit
I) Helmets
J) Rules of the Road
K) Ride Right

PAMPHLETS: Two Bicycle Program pamphlets are also available. They are: Sprocket Man Talks Road Sense; a safety pamphlet for the young or old bicyclist. Even Your Mother Could Be One... A Bicyclist; a motorists viewpoint pamphlet for non-bicycling adult groups.

COLORING BOOK: Namron Learns the Rules of the Road - A Coloring Book of Bicycle Safety.

INFORMATION SERVICE

THE BICYCLE INFORMATION SERVICE is one of the most comprehensive libraries in existence on bicycles and related issues and is the backbone of the Bicycle Program's bicycling expertise. This service is for use by local areas and citizens for inhouse research, public loan or public distribution. Local areas are able to use this service in planning for their bicycling needs or developing bicycle facilities. Requests for use of the Information Service are handled through the Bicycle Program office.

LIBRARY: The Bicycle Program's library contains approximately 1500 volumes of books, reports, plans, guides, periodicals, etc. on almost any issue related to bicycles, bicycling and bicycle programming.

FILM LIBRARY: The film library is a loan library with 25 films for any age group covering bicycling topics.

SPECIAL SUBJECT FILES: A series of approximately 175 files on especially important and frequently requested bicycle related subjects that are kept up to date with the most current data available. Requests on these subjects are filled with copies of the items in the files.

BICYCLE ROAD SHOWS: The Bicycle Program has six road shows available to provide local areas with specific programs they can present to specific audiences. Each one is geared for a different audience; planners, engineers and designers, bicyclists, educators, police officers, citizens groups, or public officials.

BICYCLE DISPLAYS: Two public displays are available for use in conjunction with local bicycle awareness campaigns or other safety programs.

FACILITIES TECHNICAL ASSISTANCE

THE BICYCLE FACILITIES TECHNICAL ASSISTANCE SERVICE is tailored to aid localities in effective bicycle programming. Interested communities may request either of two studies available or specific project advice. Requests for this assistance must come to the Bicycle Program in writing for evaluation. The approved requests are scheduled for work as time allows.

LOCAL BICYCLE FACILITIES ANALYSIS: An initial study conducted by the Bicycle Program to evaluate a locality's bicycling environment, identify local bicyclists needs and recommend procedures for improving bicycling conditions in the community.

BICYCLE FACILITY FEASIBILITY STUDY: A detailed study that examines a local area's bicycle facility proposals in terms of potential use, types of bicyclists, safety, education, engineering standards, construction costs and projected maintenance.

PROJECT - SPECIFIC ADVICE: The Bicycle Program maintains an information system of current bicycle planning principles, facility designs and engineering data. For local areas with planning staffs, this level of serice will function as a resource for current technical knowledge and expertise.

For a locality undertaking a bicycle law enforcement program, the BP could offer the following:

- Staff expertise to help set up the program.
- Available publications and films.
- Arrange contacts with other bicycle specialists to offer advice on special problems.

It should be noted that the original grant for this project was a multi-year effort that included funds for the salary of the bicycle enforcement officer in two selected communities. This funding is no longer available due to Federal budget cuts, and the availability of such funds in the near future is uncertain.

The University of North Carolina
Highway Safety Research Center

The Highway Safety Research Center (HSRC) was established by an act of the 1965 North Carolina General Assembly. Its creation fulfilled the need for a public service unit that could evaluate state highway safety programs, provide training services for state and local highway officials, and conduct independent research on matters relevant to the advancement of highway safety.

HSRC is a department of the University of North Carolina and is under the jurisdiction of the Vice-President for Research of the University's General Administration.

HSRC works very closely with state and local highway safety agencies. It has provided such services as research, development, evaluation, training, and consultation to the N.C. Department of Public Instruction, the N.C. Division of Highways, the N.C. Governor's Highway Safety Program, and to four units of the N.C. Division of Motor Vehicles: the Driver License Division, the State Accident Records Agency, the State Highway Patrol, and the Motor Vehicle Inspection Division.

HSRC's relationship with state government also includes objective evaluation of the effectiveness of state programs designed to reduce accidents. The use of reflectorized license plates was studied by HSRC to determine whether it could reduce nighttime rear-end collisions. The State Highway Patrol's use of the VASCAR and moving radar speed measuring devices was studied to determine whether their use is feasible in actual traffic situations. North Carolina's and Florida's motor vehicle inspection programs were studied to determine whether they effectively reduce accidents. Other HSRC evaluation efforts include examinations of the system of advisory warning letters to drivers, North Carolina's driver improvement programs, and the accident prediction capabilities of the North Carolina written and road tests for driver licensing.

In addition to the evaluation of actual programs, HSRC has also conducted national seminars on evaluation for both the National Conference of Governor's Highway Safety Representatives and the Motor Vehicle Manufacturer's Association. These seminars have covered a variety of program evaluation problems including what program evaluation should be, what types of proofs can reasonably be expected, and what procedures should be followed in the evaluation process itself.

Besides the seminars, HSRC is also involved in other teaching and training activities. Its staff members serve as teaching faculty members of various other departments within the University of North Carolina. HSRC has sponsored and conducted in-service training sessions for many state agencies. It has also planned and conducted workshops and conferences for state personnel and other groups.

Despite its heavy involvement in program evaluation and teaching and training activities, HSRC's primary activity is to conduct research. Each research project is directed by a senior staff member who is aided by research assistants and research associates. HSRC conducts both statistical and experimental research on driver, vehicle, and roadway factors in crashes.

In addition, HSRC is also active in technical activities that are not pure research. It has developed a new standard accident report form to be used for recording pertinent accident information by the state's law enforcement units, has drawn up new written and oral driver license examinations for testing North Carolina's driver license applicants, and is currently assisting the N.C. Division of Motor Vehicles in its effort to develop and implement a system of classified licensing.

HSRC's research covers a broad spectrum, including such topics as evaluating seat belt effectiveness, identifying unsafe driving actions, determining the impact of the 55 mph speed limit on highway safety, predicting potential drunk drivers and idetnifying existing countermeasures that can effectively reduce their accident involvement, evaluating the effectiveness of speed detection devices in reducing vehicle speeds, determining the relationship between the extent of driver injury and the make and model of vehicle, and evaluating the effectiveness of periodic motor vehicle inspection programs in reducing accidents.

HSRC has been active in the area of bicycle research, as witnessed by the following publications:

HSRC BICYCLE PUBLICATIONS

Bicycles: An Analysis of Accidents in North Carolina, February 1969, Patricia F. Waller and Donald W. Reinfurt. 50 pages.

Bicycle Riding and Accidents Among Youths: A Summary Report, July 1971, B. J. Campbell, J. P. Foley and E. A. Pascarella. 21 pages.

Statewide System for Analysis of Pedestrian and Bicycle Accidents, September 1975, Elizabeth L. Linder, Catherine B. Mullen and Lindsay I. Griffin. 93 pages.

An Analysis of Bicycle Accidents in North Carolina: 1974-1976, October 1978, William W. Hunter, David G. Cole and Elizabeth C. Leggett. 174 pages.

Bicycle Skills Test Manual, 1978, Beverly T. Orr. Copies can be obtained by writing the Dept. of Transportation, Bicycle Program, Highway Building, P.O. Box 25201, Raleigh, NC 27611.

For a locality interested in embarking on a program of bicycle law enforcement, HSRC could aid by:

- Providing staff expertise in setting up the program.
- Consulting about special problems once the program has begun.
- Helping with the evaluation design.
- Providing bicycle accident case numbers for a locality.

FILMS AVAILABLE FROM THE N.C. DOT BICYCLE PROGRAM

FILM REVIEWS

BIKE TALK 8 minutes

Geared to the elementary school grades 1-6, Bike Talk introduces a puppet narrator who discusses bicycle safety for beginning bike riders. Emphasis is placed on the bicyclist-automobile relationship stressing the dangers of bicycling in traffic. Children were used to demonstrate positive and negative bicycle-riding habits. The film also examines the results of neglectful and uncoordinated bicycling. The very young beginning bicyclist would benefit most from this film.

BIKES ARE BACK 12 minutes

This film features adults discussing bicycle safety and would most appropriately suit viewers between 14 and 20. The film begins with a series of statistics concerning the bicycle (i.e. % of reported accidents, no. of bicycles on the road.) Then, adult bicyclists demonstrate safe bicycling habits for all to follow. The narrator cites that the bicyclist is usually at fault in a bicyclist-motorist conflict, and makes some suggestions to the viewer for safer bicycling. The film ends with a check list of necessary tools and other protective measures for longer bicycling trips. (i.e. chain locks, tools and maps, tire pressure guage, etc.) The film could be viewed by young children, yet some of the language is geared to more mature viewers.

BIKE PEOPLE 15 minutes

This film would be most appropriate for children between the ages of 8 and 13. Basically, the film explains the reasons for carrying out safe bicycling habits. There is a humorous touch to the film when a young boy continues to have minor accidents as a result of neglectful bicycling. Basically, "Bike People" touches rules of the road, safety equipment, mechancial bicycle checks, and theft prevention. The narrative is clear and easily understood, yet the mode is not over-simplified. Essentially, the film encourages young bicyclists to "join the crowd" and become a safe and happy "bike person." (One criticism: the film shows several bicyclists peddling down a paved street barefooted!)

GET TO KNOW YOUR TEN-SPEED 18 minutes

This production is geared for individuals aged 14 to adult. The film deals with the mechanics, care, and safety habits one must be aware of when operating a ten-speed. Subjects such as choosing the right sized bike, shifting mechanisms, expense of bicycling, and maintenance are examined. The narrator introduces this film with two characters: an accomplished ten-speed rider and her bumbling and reckless-riding friend. We follow these characters through this film as they exemplify good and bad bike-riding habits. We are shown how and how not to ride in traffic. The film ends with information on bike-racing and urges everyone to enjoy life on a ten-speed.

BICYCLING ON THE SAFE SIDE 15 minutes

This film, suitable to anyone from 14 to adult, broadly covers all the necessary requirements for one to be a safe cyclist. Emphasis is placed on the basic rules one must follow to be considered a courteous and cautious bicyclist. Subjects such as choosing a bicycle, mechanics of the bicycle, bicyclist laws, hazardous riding, and crime prevention are thoroughly covered. We are also given a detailed summary on how to care for one's bicycle. The film encourages the rider to be "alert, cautious, and considerate" and if these steps are followed, he will be "bicycling on the safe side."

BICYCLE RIDING REMINDERS 12 minutes

This Charles Cahill Production is geared to those people between 8 and 12. The format of the film is expressed with a dialog between and narrator and a small boy. The boy is asked questions which he answers concerning safe bicycling. The film is straightforward and clearly expresses the rules and guidelines young riders should follow when bicycling. The gist of the film deals with three basic rules of bicycling: 1) See and Be Seen 2) Make Proper Signals and 3) Obey all Signs and Signals of the Motorist. The elementary school aged child could certainly benefit from this film.

EVERYTHING ABOUT BICYCLES 15 minutes

This film is most suited to Jr. High School aged children, but could be used in the Elementary Schools. This cartoon-film introduces a likeable character who is constantly getting into mischief on his bicycle. The narrator, then, follows this character back to Prehistoric times when the wheel was first built. From this point, we follow the development of the bicycle to the present time. The narrator stresses that bicycling in ancient times was much safer since cars did not exist. He then branches and gives the modern day bicyclist safety tips for bicycle riding such as night riding, bicycle road conditions (i.e. slippery roads, grating, potholes) and ends with a summary of the basic bicycling rules of the road. This film is pleasing to the viewer and emphasizes common sense, good judgment, and using one's own instincts when bicycling.

RIDE ON BY

Produced by the Santa Barbara, California Police Department, this film explains the necessity of enforcing the rules of the road for bicycles as well as motor vehicles. The message is directed at adults, and the film shows violations of traffic laws primarily by children and the accidents that result. The serious tone emphasizes the strong justification that the city presents in its decision to issue warning tickets to bicyclists.

IT'S YOUR MOVE 15 minutes

Designed along the time tested format of driver education films, "It's Your Move" presents ten common auto-bicycle accident situations. Students must recognize the potential hazard, and then quickly decide on a course of action.

THE BICYCLE DRIVER 17 minutes

Aimed at junior high and high school students. A fourteen year-old gets a bicycle, studies the rules of the road, and learns to bicycle cautiously and defensively. The cyclist learns safe cycling practices. A brief portion of the narrative is difficult to hear, but the messages to act like an adult and to follow the rules of the road are clear.

JUST LIKE A CAR 15 minutes

This film is most appropriate to the Jr. High School aged person. The film starts out emphasizing the fact that both the bicyclist and the motorist must follow certain rules when traveling together. The concept of communication between motorists and bicyclists is played up throughout the film. Other subjects such as Night Driving, Traffic Signs, Scanning, and Bicycle Maintenance are touched on.

ONLY ONE ROAD 18 minutes

Produced by the American Automobile Association, this film is most suited to teenagers on young adults. The Cross accident types are mentioned, and then some traffic situations are covered, including obstacles to the flow, left turns, visibility, night turns, and traffic rules. Bicyclists and motorists must learn to cooperate to safely share the roadway.

OTHER FILM REVIEWS

*Source: Dunlap and Associates, A Fourth Grade Course in Bicycle Driver Education - Course Guide, 1981.

Bicycle Safety: The Beginning Years*

Fiesta Films
Box 3545
Santa Monica, California 90403

PURPOSE

To show the most frequent types of bicycle accidents which occur to bicyclists in primary grades; and to illustrate countermeasures.

SYNOPSIS

The Cross Report[1] shows that most bicycle accidents involving primary grade bicyclists occur when the bicyclist emerges from alleys, driveways, between parked cars, and other so-called "rideout" situations. This film concentrates on these high-danger situations and demonstrates how to counter them: knowing when to come to a complete stop and knowing how to properly make a search for traffic. Dramatized examples also show what contributes to these accidents: over-confidence in a familiar area, false security in following another rider without checking for one's self, failure to exercise special caution when vision is blocked, distractions, failure to stop at an intersection, and others. The film is especially designed for use with primary grades and presents a well rounded countermeasure attack on the principal causes of bicycle accidents for this age group.

Grade Levels: Primary
Subject Areas: Safety/Driver Education/Physical Education/Leisure Time Sports

11 minutes	16mm Color	$200	Rental $20	Released Fall 1980
	3/4" Umatic	$150		Copyright 1981
	1/2" Beta or VHS	$150		

Bicycle Safety: Stop, Search and Assess

Fiesta Films
Box 3545
Santa Monica, California 90403

PURPOSE

To show the most frequent types of bicycle accidents and to illustrate countermeasures to avoid them.

SYNOPSIS

The Cross Report[1] isolated the most common types of bicycle accidents for all age groups. These are illustrated and recommended countermeasures are demonstrated. The film points out that most bicycle/motor vehicle accidents occur when bicyclists feel safe, because they are familiar with the location, on a neighborhood street with little or no traffic where the speed limit is less than 35 miles per hour and that the accident probably will be the bicyclist's fault. The reason is given that repeated trips safely concluded over the same roads and intersections, have made the bicyclist assume incorrectly that there was little or no risk, that he/she would never encounter any danger along that route. The tendency then is to ignore normal safety procedures. Illustrated in live action and animation, the film shows the most common types of "rideout" accidents and discusses why they occurred. As a countermeasure to eliminate these types of accidents, the film emphasizes the need for each bicyclist always to institute his/her own visual search for approaching traffic--by looking in a set pattern...first left...then right...then left again. Also illustrated are accidents which occur when the motorist is overtaking and passing a bicyclist, especially on rural type, two lane roadways with no shoulder or sidewalk. The dangers for bicyclists driving at night, a time when there are more motorists under the influence of intoxicants, are also discussed. Finally, the film also shows accidents that happen when either the bicyclist or motorist makes unexpected, sudden, unsignaled moves and re-emphsizes the need for bicyclists constantly to visually search for traffic and to assume that there is risk. This film presents a well rounded countermeasure attack on the principal causes of bicycle accidents for all age groups from elementary through adult.

---

[1] The Cross Report is titled Bicycle Safety Education-Facts and Issues researched and written by Kenneth D. Cross, Ph.D., Anacapa Sciences, Inc., published by A.A.A. Foundation for Traffic Safety. To obtain a copy, contact your local A.A.A. Auto Club or write A.A.A. Foundation for Traffic Safety, 8111 Gatehouse Road, Falls Church, Virginia 22042.

Audience: Excellent for in-service teacher training and/or parents.
Subject Areas: Safety/Driver Education/Physical Education/Leisure Time Sports

14 1/2 minutes	16mm Color	$270	Rental $30	Released Fall 1980
	3/4" Umatic	$200		Copyright 1981
	1/2" Beta or VHS	$200		

Bicycle Safety: You Can Prevent an Accident
Pyramid Films
1537 14th Street
Santa Monica, California 90406

PURPOSE

To present a film that shows life-saving "how to's" and gives reasons "why" by talking to bicyclists of all ages.

SYNOPSIS

In this bicycle safety film for all age cyclists, the narrator stresses the importance of knowing the limits of the equipment and of yourself. The right bike to buy should be determined by whether or not it fits you, if it is capable of performing to your needs, and suggestions for selecting the right seat, handlebars, and whether or not you need multiple gears, are pointed out as features to look for. Re-enactments show some accidents that happen to bicycle riders, why they happen and how they can be prevented, constant alertness is stressed in all cases. Other features of this film include theft, safety lights and reflectors, arm signals, riding techniques, knowing the laws of the road and obeying them, and the absolute necessity of always riding defensively. All phases of safe bicycling are covered in detail and the differences in being a successful and happy cyclist and being a failure are made quite clear.

Grade Levels: Primary, elementary, junior high, senior high
Subject Areas: Bicycle safety/guidance

19 minutes 16mm Color $300 Rental $30 Copyright 1975

*Source: Minnesota Bike Safety Instructor's Guide.

BICYCLE FILMS*

*__Bicycles Are Beautiful__ Color. 27 min. Narrated by Bill Cosby, this film includes a history of bicycling, rules of the road and a safety inspection of bikes. Interesting and fast faced. *4th grade and up.*

Bicycle Driving Tactics Color. 14 min. Shows that there is a difference between riding your bike and driving a bike. Covering everyday biking situations; traffic, signs and signals, pedestrians biking on different surfaces. *4th grade and up.* (1977)

Bicycle Riding Reminders Color. 11 min. Three basic bicycle riding and safety rules are stressed: Importance of good observation; proper ways to make turns and lane changes after giving proper signals; and when and where to stop for stop signs and traffic signals. An official test demonstrates what happens when an automobile hits a bicycle and its doll rider at 30 mph. Emphasis on reaction time and braking distance. *K-6th grade* (1971)

Bicycle Safely Color. 12 min. Illustrates typical dangers faced by bicyclists, shows why accidents happen and how to avoid them. Demonstrates safety practices, suggests methods to prevent theft, and establishes the value of safe riding habits for all ages. *Primary through senior high.* (1974)

Bike People Color. 11 min. This film deals with basic safety precautions, optional equipment, and the protection against theft. Bike vehicle codes and rules are explained. *Junior and senior high school.* (1974)

Bike Talk Color. 15 min. Bike talk takes a positive approach in teaching bicycle safety through all the potential dangers that confront bicyclists every day. Rich is a sensible boy, handling his bike properly. He sets a good example for bicycle riders of all ages. (1976)

Hush Puppy's Bright Idea Color. 18 min. Shari Lewis and her puppets, Lamb Chop and Hush Puppy, with Seymour Safely, and a group of children 3 years to 14, decide to produce a movie about reflective materials that make them visible to motorists at night as cyclists or pedestrians. *K-6th grade.* (1975)

*__Just Like A Car__ Color. 12 min. Illustrates specific operating skills such as hand signals, turning procedures, riding on the right, hazard identification and defensive driving. Created by traffic safety experts, motivates and develops enthusiasm for bicycle safety. *Elementary through senior high.* (1972)

Mike The Bike Color. 10 min. Bicycle fatalities. Check bicycle mechanism before taking bike on the road. Know and master your bicycle before you take it out on the road. Know the hand signs and bicycle safety rules. Stay alert. *Upper elementary and junior high level.* (1974)

Once Upon A Bicycle 10 min. The importance of keeping your bicycle in good mechanical condition. The importance of a safety check.

Only One Road Color. 18 min. The bike/car traffic mix stresses that greater understanding and cooperation are needed between bicyclists and motorists to safely share the roadway. (1975)

Right On By Color. 8 min. A police training film that explains the need for bicycle enforcement. Consequences of not enforcing bike laws are shown. *Junior and senior high.* (1973)

Someone Stole My Bike Color. 20 min. License and register your bike with your local police. Lock your bike when not in use. How to lock it properly. *3rd grade and up.* (1978)

Spokey, The Clown Color. 15 min. Spokey the Clown, with the aid of his magic "talking bike," demonstrates common bicycle safety problems and talks about right and wrong ways of driving bikes. (1973)

Straight Talk About Defensive Bike Riding Color. 9 min. Bicycling safety fundamentals are covered rather than emphasis on laws regulating bicycle operation. Good, clear illustrations show how to select proper size bike, how to adjust seat for safe riding, and how to apply brakes, cross RR tracks, and be visible at night. *Elementary through senior high.*

You And Your Bicycle 10 min. All phases of bicycle safety, including maintenance, alertness, correct arm signals, types of intersections and what to watch for.

Available on a free loan basis from:

Department of Public Safety
Film Library
3800 Dunlap Street
St. Paul, MN 55112

Those asterisked are also available through your local Minnesota County Extension Office.

EDUCATION

In the course of searching for materials related to bicycle law enforcement, the HSRC staff came across many references to educational materials. Since some educational concepts will likely be ingredients of an effective enforcement program, especially concepts stressing operating skills, hazard recognition and emergency maneuvers, we thought it would be instructive to offer some selected educational attachments. Even though these attachments represent only a sample of available materials, these particular courses and materials are well thought of by most bicycle specialists.

EDUCATION

ATTACHMENT A

EDUCATION WORKSHOP SUMMARIES
FROM THE PRO BIKE 80
CONFERENCE FOR BICYCLE SPECIALISTS

WORKSHOP 14
EDUCATION AND CYCLING: NEEDS AND OBJECTIVES
JOHN FORESTER
MAUREEN WIRTH

OBJECTIVE: This presentation focused on the different needs for cyclist training by different parts of society. Not only do persons who wish to cycle need training, but so do those who already cycle, and society as a whole has needs which are best satisfied by cyclist training. In turn, these needs for cyclist training generate the need for a system of training instructors and for establishing their recognition as providers of useful skills which increase effectiveness and decrease accidents. These needs form the objectives of any rational system of cyclist training, which may be met in somewhat different ways by different programs.

MAJOR TOPICS: Personal Needs. To take advantage of cycling transportation's flexibility, local speed, economy, and its concomitant advantages of health and recreation, with reasonable efficiency and accident rates, the average person requires:

> Personal recognition that she/he needs adequate training that provides competence and confidence.

Public Needs. Because cycling transportation uses fewer of society's resources than other forms, and because it can be used by persons without immediate access to other forms, society would benefit from increased cycling transportation (even somewhat more than the sum of the individual optima), if it can be achieved at a lower accident rate. The present accident rate is at least 5 times higher than reasonably achievable.

Obtaining increased cycling transportation at a low accident rate requires a great increase in average cyclist competence and confidence, changes which are best produced by effective training.

Establishing nationally effective cyclist proficiency training programs requires public recognition of their necessity and a staff of properly trained instructors.

Skills to Meet Needs. Safety Skills: Every cyclist requires the skill of cycling in the existing environment, i.e., hills, rain, road surfaces and traffic. If he doesn't have the requisite skill, he assumes the unreasonable risk that circumstances will exceed his ability. Since the cycling environment is largely the same in all urban areas, all cyclists require similar skills, regardless of age or intention. Analysis of traffic cycling procedures shows that the same steps are required for each maneuver regardless of the level of traffic; heavier traffic requires greater skill only in processing more information faster.

Efficiency Skills: Cyclists cannot operate efficiently without proper equipment properly maintained, and unless they use physiologically efficient technique. With today's wide variety of equipment and quality, low levels of service, and lack of cycling tradition, most cyclists require some training in these matters.

Enjoyment Skills: The more enjoyment that cycling provides, the more cycling will occur; the more enjoyment provided during cycling training, the more participants will enroll. Since cycling training cannot be compulsory, enjoyment must be an integral part of the training program.

Confidence: Most participants start with intense cyclist inferiority feelings produced by our culture. Confidence grows as participants develop the above listed skills and prove to themselves during supervised practice that these skills work in the real cycling environment. Confidence is not given or transmitted like information; it grows from within each successful participant. (There are only a few failures.)

Differences Between Child and Adult Programs. Since children and adults cycle in the same environments (differing, if at all, only in traffic intensity), they require similar skills. However, by age 14 most people have acquired some understanding of the traffic system; they have developed concepts of lanes, flow direction, signals, even right-of-way and yielding to other traffic, to some extent. These people can be trained according to a logical progression of similar maneuvers. Younger children, however, do not have this preparatory information. Their training program must be organized around the development of these traffic concepts, and must include special instruction and special practice sessions which develop their understanding of these concepts.

CONCLUSION: The discussion followed the outline above, bringing in details from four programs to show how each need had been met in similar ways. The four programs are: Effective Cycling for Adults
Effective Cycling for Children
Mountain Bicyclists' Association Basic Bicycling for Adults
Mountain Bicyclists' Association Comprehensive Bicyclist Education Program

The discussion admitted that some needs have not yet been met. For example, society needs a system for training cycling instructors as a normal part of teacher preparation, but in the absence of present demand for cycling instructors this need has not been appreciated by society.

JOHN FORESTER, M.S., P.E.
CYCLING TRANSPORTATION ENGINEER
726 MADRONE AVE, SUNNYVALE CA 94086, 408-734-9426
EFFECTIVE TRAFFIC-SAFE CYCLING, PROPER HIGHWAY DESIGN, EQUAL ENFORCEMENT

MOUNTAIN BICYCLISTS' ASSOCIATION
1290 Williams Street • Denver, Colo. 80218 • (303) 333-BIKE

PRO BIKE 80, National Conference for Bicycle Program Specialists

Session 14

Education and Cycling: Needs and Objectives

John Forester, M.S., P.E.
Maureen Wirth, Mountain Bicyclists' Association

Personal Needs

To take advantage of cycling transportation's flexibility, local speed, and economy, and its concomitant advantages of health and recreation, with reasonable efficiency and accident rate, the average person requires:

- Personal recognition that he requires adequate training;
- Training that provides:
  - Competence
  - Confidence

Public Needs

Because cycling transportation uses fewer of society's resources than other forms, and because it can be used by persons without immediate access to other forms, society would benefit from increased cycling transportation (even somewhat more than the sum of the individual optima), if it can be achieved at a lower accident rate. The present accident rate is at least 5 times higher than reasonably achievable.

Obtaining increased cycling transportation at a low accident rate requires a great increase in average cyclist competence and confidence, changes which are best produced by effective training.

Establishing nationally effective cyclist proficiency training programs requires public recognition of their necessity and a staff of properly trained instructors.

Skills To Meet Needs

Safety Skills

Every cyclist requires the skill of cycling in the existing environment: hills, rain, road surfaces and traffic. If he doesn't have the requisite skill, he assumes the unreasonable risk that circumstances will exceed his ability. Since the cycling environment is largely the same everywhere, all cyclists require similar skills, regardless of age or intention. Analysis of traffic cycling procedures shows that the same steps are required for each maneuver regardless of the level of traffic; heavier traffic requires greater skill only in processing more information faster.

Efficiency Skills

Cyclists cannot operate efficiently without proper equipment properly maintained, and unless they use physiologically efficient technique. With today's wide variety of equipment and quality, low levels of service, and lack of cycling tradition, most cyclists require some training in these matters.

Enjoyment Skills

The more enjoyment that cycling provides, the more cycling will occur; the more enjoyment provided during cycling training, the more participants will enroll. Since cycling training cannot be compulsory, enjoyment must be an integral part of the training program.

Confidence

Most participants start with intense cyclist inferiority feelings produced by our culture. Confidence grows as participants develop the above listed skills and prove to themselves during supervised practice that these skills work in the real cycling environment. Confidence is not given or transmitted like information; it grows from within each successful participant. (There are only a few failures.)

Differences Between Child and Adult Programs

Since children and adults cycle in the same environments (differing, if at all, only in traffic intensity), they require similar skills. However, by age 14 most people have acquired some understanding of the traffic system; they have developed concepts of lanes, flow direction, signals, even right of way and yielding to other traffic, to some extent. These people can be trained according to a logical progression of similar maneuvers. Younger children, however, do not have this preparatory information. Their training program must be organized around the development of these traffic concepts, and must include special instruction and special practice sessions which develop their understanding of these concepts.

This discussion will include specific descriptions of how these needs are met by four cyclist proficiency training programs:
Effective Cycling for Adults
Effective Cycling for Children
Mountain Bicyclists' Basic Bicycling for Adults
Mountain Bicyclists' Comprehensive Bicyclist Education Program

Discussion from the floor will follow.

NEW DIRECTIONS IN BICYCLING EDUCATION

ELLEN CONE

Introduction

Bicycling is evolving from children's play to an enjoyable activity for everyone -- an activity that helps provide an answer to today's problems of energy shortages, pollution, rising costs, and health maintenance. The educational needs associated with bicycling now extend beyond just learning the rules of the road. The broadened concept of "bicycling education" encompasses bicyclists' needs to handle a bicycle safely and efficiently, motorists' needs to share the road with bicyclists, and professionals' needs to apply their skills to the specific problems faced by byciclists.

Just as the emphasis has switched from recreational bicycle facility programs to broad-based comprehensive programs, our attention should now shift to expanding the focus of bicycle safety education to comprehensive programs addressing the needs of all cyclists, child and adult, as well as motorists, and professionals.

In the sections that follow, we will present a brief overview of traditional bicycle safety programs and offer some recommendations for new directions in bicycling education.

Traditional Programs

Traditional bicycle education programs available today can generally be categorized as bicycle safety education programs. Bicycling is usually treated as part of an overall traffic safety program for grades kindergarten through six, addressing pedestrian, bicycle, and school bus safety. These programs are designed to protect children from injury and to introduce them to the responsibilities of operating in the traffic system that they will face as an automobile driver. The information focus is on rules of the road and common sense. Specific bicycle information addresses hand signals, bicycle fit, safety equipment, and safe behavior on a bicycle. A list of safety "do's and don'ts" such as "stop at all stop signs" and "don't play games on your bike," is a common feature. Activities take place in the classroom and employ methods such as handouts, songs, comic books, and film strips. More elaborate programs might include a "safety town," where the children can practice walking and bicycling on a simulated street system; the instruction covers rules of the road and observance of traffic signs and signals. One other common on-bike activity is the bike roadeo, offered on a one-time basis.

New Educational Directions

These traditional programs do not adequately meet the new needs of bicycling. With all the emphasis placed on safety and avoiding cars, programs cannot help but create the impression that bicycling is dangerous, and that bikes are a nuisance on the road. We are now realizing that bicycles are a needed and enjoyable alternative to the automobile. Furthermore, it is clear that no matter how extensive the bicycle facility system may be, people will always need to know how to ride in traffic. If bicyclists learn and master the physical and sensory skills necessary to efficiently interact with cars in an organized manner, a healthy respect for cars can replace fear. Because of its social and personal benefits, bicycling should be presented as a life-long activity rather than as a preparation for automobile driving.

In order to teach people to effectively bicycle on the streets, we need to develop methodologies that improve operator effectiveness. As John Forester states, the focus should be on what to do and how to do it instead of what not to do. This means teaching the rationale behind rules, as well as the mastering of behavior sequences that are triggered by visual hazard recognition.

We are now finding through research that requiring students to memorize the rules of the road is not sufficient to reduce bicycle accidents. For instance, accidents often occur when a bicyclist "rides out" into the street from a driveway. Children have been told to be careful when bicycling on the street, but in order to effectively change this potentially dangerous behavior they need to learn how to recognize hazards, how to effectively scan, and how to perform an emergency stop. Additionally, there are some instances in which strict adherance to the traditional rules of the road creates more of a hazard than it was designed to reduce. For example, bicyclists are usually taught to ride to the far right of cars, yet there are times when it is safer to control the lane, as when cars are making right hand turns. To adequately prepare cyclists, course information must be consistent with current research and experimental evidence concerning safe and efficient bicycling behavior.

Delivery methods can be the determining factor in the success of any educational program. Bicycling is a physical skill involving sensory-motor responses, the same as tennis, basketball, or skiing. Bicycling has the added importance of being a means of transportation, which, unless performed skillfully, can result in serious accidents. No one would ever simply show a filmstrip of people playing tennis, giving oral instructions to follow through on the swing, and consider the job of tennis instruction complete. Bicycling, also, can only be effectively taught by getting people out on their bikes, teaching them such skills as how to scan and make left-hand turns, and providing sufficient opportunities to practice in both a controlled and real-world environment. It is very difficult for children, as well as adults, to combine a series of individual behaviors such as scan, signal, and track a straight line, into a smooth, safe left-turn maneuver to the appropriate lane.

In order to construct a new, effective educational program, it is essential to move beyond the problems of existing programs and focus on the characteristics of a "good" program. These will be summarized below for each of the primary audiences: bicyclists, motorists, and professionals.

Bicyclists

There are several innovative bicycle programs currently available. The children's programs provide a good background in rules of the road, route selection, bicycle fit, hazard recognition, and maintenance. The children then progress from playground training in basic handling skills (scanning, stopping, rock dodges, and instant turns) to on street practice in such maneuvers as left hand turns, and lane position. In this way the children become familiar with street and traffic patterns while getting the feel for combining sensory skills such as hazard recognition with the appropriate physical maneuver. The aim is to build upon skills that have been learned, practiced, and mastered. The programs are designed to continue throughout the school year as either a combination of regular classroom/physical education curricula, or solely within the physical education program. A crucial element is teacher training, as the program cannot be successful without a knowledgeable, interested, and supportive teacher.

Older cyclist needs generally have been ignored but there is a strong movement to develop educational programs for this audience. Teenage and college cyclists should be the target of programs covering the full range of bicycling activities: commuting, touring, racing, conditioning, etc. The physical education department is the most likely source for these programs. Basic operating skills such as scanning, rock dodges, braking, etc. should be emphasized as well as maintenance and repair practices. Coursework can be complemented by extra-curricular bicycle clubs, varsity racing, and bicycle repair cooperatives.

Adult cyclists cannot be expected to have retained their childhood bicycling "expertise." Novice adult cyclists have a totally different set of anxieties than their younger counterparts. Bicycling courses offered to novices through continuing education programs should acknowledge these anxieties and focus on ways to overcome them. These courses should address the wide range of concerns of adults, from equipment and route selection to road-side repairs. On-bike experience should be an integral part, emphasizing such items as correct lane position, intersections, and left turns. The emphasis should always be on the positive benefits of cycling, although real-world hazards should be addressed clearly and completely. A student should come away from the course with self-confidence in his or her ability to handle a wide range of traffic situations.

Since the novice course is really a brief introduction to cycling, there will still be a need to provide in-depth coverage of all aspects of bicycle operation. This type of course, for the more advanced cyclist, should be tailored to meet the specific interests of the audience. However, safe and efficient operating techniques should be stressed no matter what the particular type of bicycling being covered.

Motorist Education

Obtaining a driver's license in this country has been accorded all the significance of a major rite of passage in a young person's life. It marks the transition from dependent child to independent adult. Prospective drivers are trained in the intricacies of automobile operation, traffic laws, emergency procedures, and general maintenance. They are given six hours behind-the-wheel practice in addition to extensive classroom training.

They do not, however, receive specific instructions on how to deal with bicyclists in traffic.

The NHTSA accident research reveals that motorists involved in accidents with bicyclists frequently did not know how to deal with the bicyclists they encountered on the roadway. For example, the motorists misjudged the distance required for passing a bicyclist or failed to yield the right of way in a left turn situation. There were many cases in which motorists actually failed to see the bicyclist even though they thought that they were scanning carefully.

As more and more bicyclists take to the streets, motorists will become more accustomed to seeing them. Increased numbers do not, however, eliminate the need for motorist education on the principles of roadsharing with slower-moving vehicles. There are several options available for delivering educational messages to motorists. The most fundamental is through the existing driver's education system. Another option is the inclusion of questions on bicycle safety in the driver's licensing written exam. Use of the public media, or mail distribution of information can also be effective by using a simple message to increase motorists' awareness of bicyclists.

Education Programs for Professionals

A bicycle professional is anyone who works with or for bicyclists, or has to deal with them regularly as part of his or her job. This could include law enforcement officers, traffic engineers, bus drivers, school teachers, judges, and planners. The educational needs of each of these groups vary considerably according to the nature of the work performed.

Enforcement officers are essential to the assurance of a smoothly run traffic system. However, most policemen consider enforcement of bicycle laws unimportant, or are confused by the often vague and sometimes contradictory ordinances that apply to bicyclists. The development of police on-bike patrols can help policemen to understand the problems of bicyclists, including what behaviors lead to accidents. Police academy courses or in-service training are essential to increase the overall awareness and acceptance of bicycling by enforcement personnel.

Due to the bicycle boom, traffic engineers and planners are often expected to now become bike-way planners with little or no instruction in what makes a good bikeway. The Federal Highway Administration and John Forester have each developed much-needed programs to alert traffic engineers and planners to the special problems encountered by bicyclists.

We cannot expect to have high-quality bicycling education programs without conscientiously training instructors. Some possible methods are in-service training, special workshops, and graduate courses. Some form of teacher certification is also highly desirable, to insure that only qualified individuals are allowed to conduct the program, to provide incentives for teachers to learn more about bicycling, and to increase teachers' bicycling awareness.

Conclusion

The growth in the popularity and prevalence of bicycling reveals a great need for education to ensure skillful, efficient, and safe bicycle operation. However, there is a limitation in the scope and effectiveness of current educational programs. By addressing the needs of bicyclits, motorists, and professionals, bicycling education can fill this gap through programs that treat bicycling as a skilled lifelong activity and as a viable mode of transportation.

WORKSHOP 15
BICYCLING EDUCATION STRATEGIES
SALLY JANECEK

OBJECTIVE: This workshop session was designed to give an overview of the educational tools on the market.

MAJOR TOPICS: The wide variety of educational approaches and resources tend to "clutter" the market. The workshop leader presented several educational tools that are used in the four typical approaches to bicycle safety education. The approaches being:

1. Parent involvement in the initial training of their children;
2. Elementary school assembly/classroom lecture via teacher or police officer with films/registrations;
3. Service organization programs - including rodeos, handouts, Saturday bike checks, etc.; and
4. Elongated courses - "Effective Cycling"; on-road modules.

At this point, the workshop leader discussed, with audience participation, what was happening in the field, noting resources and programs in the following areas:

1. Schools - seems to be a need to remove the obstacles to programs that encourage on-road training (liability, teacher confidence); teachers want a curriculum which is simple, with teacher training;
2. Driver education curricula - components should encompass the "share the road" concept with the rights and responsibilities of both motorists and bicyclists emphasized; encourage students to take the role of a bicyclist on a driver education range;
3. Community education/bicycle clubs - opportunites to provide adult bike courses with emphasis on commuting as well as recreational needs; offer tours, races, marathons and other special events; bicycle clubs have the responsiblity to provide riding skill and safety sessions on a continuing basis;
4. Law enforcement - should be cooperation between program organizers and law enforcement personnel; work with professional law enforcement associations to incorporate bicycle awareness and training in their instructional academies;
5. Commuters - several excellent programs were cited; must provide the training as well as facilities (parking and changing areas); media coverage has assisted commuters; noon-hour sessions featuring special interest items seem to be popular;

6. Special events/services - many "tricks of the trade" were shared at this point, with emphasis on experimenting with different means to gain the attention of your community; some examples cited were Bike Expo's at malls and bicycle month activities; and

7. Public relations - a constant need to provide quality resources to the media was cited, e.g., public service announcements for local radio or T.V., billboards, newspaper columns, posters, novelty items (buttons, bumper stickers, etc.); a resource guide is provided with this summary.

SUMMARY: The workshop session highlighted the need to create a community plan to educate all those involved with the traffic situation. Participants discussed pros and cons on approaches to bicycle education. The community awareness issue and quality resources seemed to be the pivotal point for programs. Many concerns and questions need to be addressed in these areas.

The qualification of instructors was discussed. There is concern over whether bicycling can best be taught by bikers who are trained to teach or by teachers and community leaders who are trained to bike. The general feeling was to provide both approaches, and assist programs with expertise identified and found in a community.

The workshop leader expressed the need to develop recommended guidelines to follow when developing or evaluating the resource material on the market. Often the community leader or educator is confused with the educational tools that are found on the market. We need to evaluate the "clutter" on the market and provide the expertise to agencies and organizations who need to improve their materials in order that they may continue to provide bicycle safety information to the public.

WORKSHOP 16
BICYCLING EDUCATION: IMPLEMENTATION PROBLEMS AND SOLUTIONS
RICHARD BLOMBERG

PANEL MEMBERS: Roger DiBrito, Physical Education Specialist, Missoula Public Schools, Missoula, Montana

Eileen Kadesh, Bicycle Coordinator, Department of Transportation, District of Columbia

OBJECTIVE: Since this session was the last of many scheduled workshops on the various aspects of bicycling education, it was designed to summarize major implementation problems. The theme chosen to help accomplish this objective was the separation of "fact" from "myth" in bicycle safety education. Eileen Kadesh's presentation was designed to highlight the problems of dealing with school and government administrations who must be involved with (or at least sanction) any bicycle education program. Roger DiBrito discussed his experiences in the development and implementation of the fourth grade program in Missoula.

MAJOR TOPICS: There was general agreement that most problems surrounding bicycling education have been solved by someone, somewhere. The real problem in any particular implementation is to uncover and utilize the best solution. Problems some may consider beyond solution which others have dealt with without destroying the objectives or apparent effectiveness of their programs include:

- Money - the never-ending competition for funding, particularly between bicycle and pedestrian programs.
- Minority involvement - particularly the appropriateness of audio-visuals for minority groups.
- Administrative apathy - city and school administrations can be convinced to support bicycling education.
- General bureaucracy
- Involvement of all key elements - police, motorists, etc.

Communication among bicycle program specialists is one good way to spread the word on viable solutions.

The most controversial topic dealt with the best method of obtaining quality instructors for a program. The majority believed it is best to recruit trained and experienced teachers and then bring them up to a suitable level of competence in bicycling. A minority opinion was that only expert cyclists can really teach bicycling, although they must first be taught the principles of teaching. Both factions, however, agreed that the inclusion of bicycling studies in the college curricula for physical education majors was essential and, perhaps, the most productive long term step for the improvement of bicycling education.

The final major topic concerned the overall credibility of a program. It was agreed that creating the proper "image" for a program is important in overcoming implementaion problems. Image creation first involves performing "market research." It is extremely important to understand what administrators, parents, students and teachers expect a bicycling education program to accomplish. Then, the program should "grow" from within its environment. It is desirable for a program to be identified with the system in which it will be used. This gives it credibility and a sense of local identity. A local adaptation of a nationally developed program may be a good way to achieve an acceptable degree of localization without having each community incur the cost of total program development. As part of credibility, those who develop and operate a program must be willing to alter it so it can be adapted to changes in bicycling and improved as operating experience is amassed.

CONCLUSION: Time did not permit a full discussion of every topic of interest. The tone of the session was, however, extremely positive and indicative of an apparent belief that bicycling education has turned the corner and can now look forward to more solutions and, perhaps, fewer problems.

WORKSHOP 18
CASE STUDIES OF INNOVATIVE EDUCATION PROGRAMS
KAREN MISSAVAGE

PANEL MEMBERS: John Forester, League of American Wheelmen and founder of Effective Cycling

Roger & Sharon DiBrito, Missoula Public Schools and the Missoula Bicyclist Training Program

Maureen Wirth, Mountain Bicyclists Association, Education Program Director

OBJECTIVE: This workshop was a brief overview of three different education programs, each a significant departure from the traditional traffic safety education curricula. Panelists described the history and evolution of their respective programs, summarized the programs' contents, and offered an idea of the effectiveness (both measured and assumed).

MAJOR TOPICS: John Forester began by explaining his personal experience with outdoor programs at his local community college, and cycling. He developed Effective Cycling (EC) as a program for junior college students of all ages, and cited the conflicts of developing scientific knowledge vs. old-time traditions; there was a lot of controversy over "Should you teach people how to ride bicycles by putting them on bicycles and showing them how?" As EC evolved, this controversy faded and now there are few programs which attempt to instruct cyclists without on-bike sessions.

EC sessions are a mixture of mechanics, general principles of traffic, specific situations in traffic, and first-hand experience with cycling in those situations. Forester involved the class in learning by asking the 'leaders'--those who pick things up faster, have more experience with the different concepts, or who have done their homework--for assistance in clarifying demonstrations and explanations. He also involved assistants on the group rides; this prevents anyone's getting lost or stranded. He praises those who are learning and practicing the different techniques, and helps those who are slower.

EC homework includes reading assignments from the text (authored by Forester) and riding assignments of about 20 miles per week, both to maintain/increase the student's cycling capabilities, and to practice techniques learned previously. The final exam is a riding test, a written test, and a time trial (individual race); almost all students demonstrate marked improvement on all three. Some students can't ride and think about traffic at the same time, and they usually drop out by the second session. EC graduates are adequately prepared to join a bicycle club; those who are good at explaining concepts are encouraged to use these skills in teaching, activism, or advocacy roles.

After some initial confusion caused by the promised appearance of a local camera crew, Roger and Sharon DiBrito ran a slide presentation on the Missoula Bicyclist Training Program. Using the Cross accident statistics as the justification for the program as well as high level of bicycle usage in Missoula, the program was funded by the MT Highway Safety Division of the Department of Community Affairs. It was developed [illegible] the former Missoula Bicycle Coordinator, Roger DiBrito, and local bicycle education specialist Dan Burden. It has been adopted for use in school districts throughout the state.

The Program is presently directed at 4th-grade, nine-year-old students. It consists of fifteen lessons on riding skills, hazard identification, and traffic analysis. It includes training of P.E. and classroom teachers, with instruction in the on-bike maneuvers and AV materials, respectively. Accident analysis, current research, effective education, enforcement guidelines, program development, implementation, and evaluation were all stressed; an incentive in the form of two graduate credits is available from Western Montana College in Dillon.

The Program 's basic assumptions are that 1) there are emergency maneuvers which can help get a cyclist out of a dangerous sitatuion; 2) you can't teach safe cycling effectively without getting on bikes; and 3) you can't expect children to ride safely in traffic without showing them how traffic works. The guiding principle is: if you want to avoid accidents with cars, you must learn to be where drivers expect you, and be doing what drivers expect you to be doing.

The Program's lessons include sessions on bicycle sizing and equipment check, traffic mix, hazard identification, stopping, reaction time/defensive driving, emergency maneuvers, scanning to the rear, traffic flow, low-to-high traffic intersections, route selection, and a neighborhood tour. Alternate lessons include sessions on local ordinances, lifetime cycling, a ride to a local shopping center, and a skills review.

The Program was evaluated by a team from the University of Montana, and included a large-scale behavioral test complete with control groups, and a post-training written exam. The evaluation indicated that the Program was effective in producing superior on-bike performances, and higher scores on the written exam; skills taught during the course improved considerably, while more general skills remained the same. The teachers expressed satisfaction with the course materials, willingness to teach it again, and a desire to incorporate the Program into the existing curriculum. Most students use their own bikes, plus those donated by a local shop.

Maureen Wirth described the development of the Comprehensive Bicyclist Education Program, (CBEP), and added that that title would likely be changed to something less wordy, as with Mountain Bicyclists Association's(MBA) 'Basic Bicycling' program. The CBEP is similar to the Missoula program, and includes that as a resource; MBA did extensive research and reviewing of the available literature, including the Cross data. The next step was a task analysis, similar to that used in driver and motorcycle education; MBA felt that this would lend added credibility and respectability to the CBEP, as well as organize all the necessary tasks in sequence. The CBEP is presently in a draft stage, and will be tested in Denver-area schools in spring 1981. It consists of fourteen ½-hour lessons, using a team-teaching approach, and includes various enrichment activities, such as units incorporating bicycles and bicycling into different subjects, such as history. The final version of the CBEP will be available in Fall 1981.

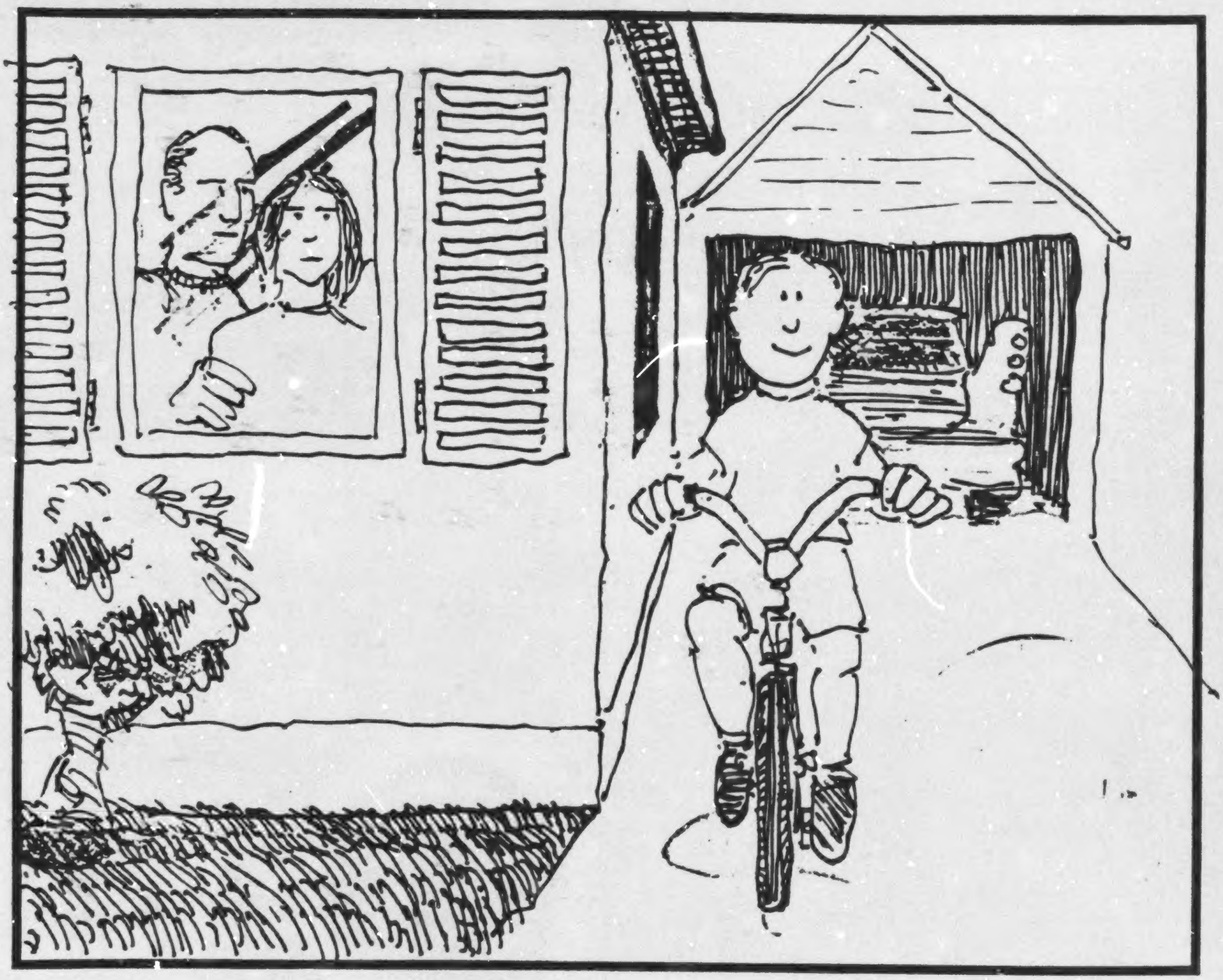
CONCLUSION: Both Forester and DiBrito assuaged fears of liability hassles; in Missoula, parental permission is obtained through field trip release forms, and EC is considered fairly tame when compared with rock climbing, hang gliding, skiing, and other outdoor activities. Forester summed it up well: traffic-safe cycling education will help decrease accident rates; most people in the courses are mixing it up with traffic anyway. The EC and Missoula programs are available from John Forester and the DiBritos, respectively, and the MBA program will be available in Fall 1981. In addition, evaluations of these and other programs are available in the pages of Bicycle Forum Magazine.

EDUCATION

ATTACHMENT B

A BICYCLE SAFETY PAMPHLET
BY JOHN WILLIAMS,
EDITOR OF BICYCLE FORUM MAGAZINE

Reprinted with permission of Bicycle Forum Magazine. Reproduction by any means without the expressed written permission of Bicycle Forum is prohibited. Copyright 1981 Bicycle Forum Magazine.



BICYCLE SAFETY

What every parent should know

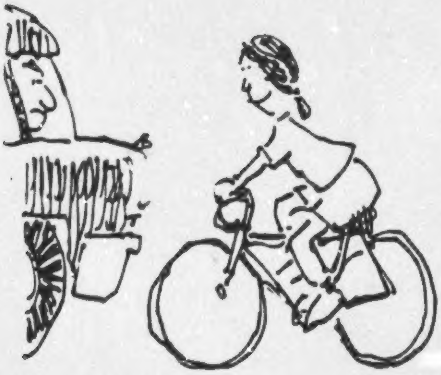
text & illustrations by
John E. Williams
Editor of Bicycle Forum Magazine

BEST COPY AVAILABLE

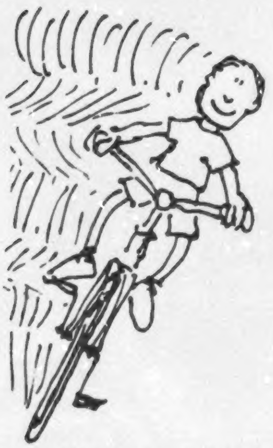
Bicycling is fun, it helps us keep fit, and gives us mobility. For kids, the bicycle is the first vehicle, a source of pride, and…it can lead to serious accidents and injury. The attitudes you, as a parent, instill in your child *now* will determine how he or she will ride for years to come. If you work at it, if you teach your child as if his or her life depended on the lessons—which it does—then you will feel more confident when he or she rides out of the driveway.

First things first

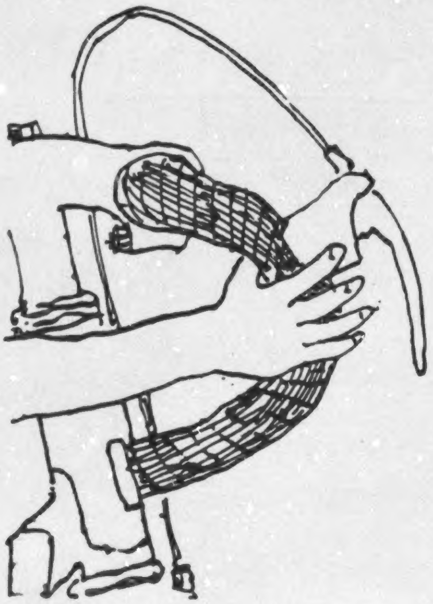
First, however, let's see what *your* safety 'IQ' is. The following are common attitudes parents have about bicycling. Each of them leads to accidents.



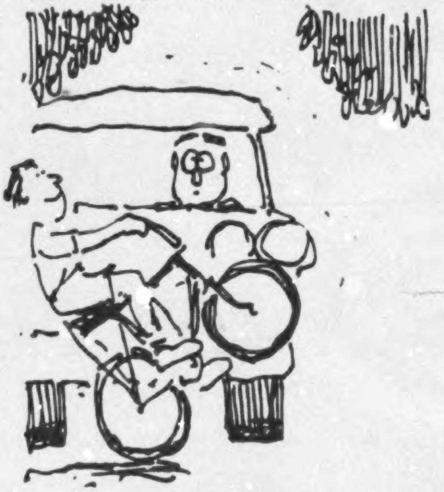
"B[illegible] [illegible] ride facing traffic." This comm[illegible] [illegible] responsible for about 23% of all car/[illegible] collisions. Riding against traffic puts [illegible] cyclists where motorists least expect t[illegible]. Unpredictability is the result and m[illegible] bicyclists—particularly kids—are hurt because of it.



"My child needs a bike he/she can grow into." That's the last thing your child needs. Young kids have enough trouble controlling a bike the right size. Put them on a big bike and they wobble and weave down the road. Your child should be able to straddle his or her bike with both feet flat on the ground.



"My child wants a ten-speed, so I guess I'll get one for her/him." It may be hard to buck the trend towards buying youngsters ten-speed bikes but think of it this way: young hands often can't make handbrakes work. Ask a ten year old how he or she stops a ten speed and the answer will probably be one of the following: "I drag my feet." "I run it into something." "I don't stop." Unless you want to make sure the bike you buy has high quality handbrakes with levers made for small hands, you're better off getting your child a bike with a coaster brake. Maybe later, a ten speed will be in order.



"My child only rides around the neighborhood so I don't worry." You should. The majority of bike accidents happen near home. Further, a large percentage of the fatal car/bike collisions happen on two-lane streets with speed limits under 30mph. Does that sound like your neighborhood street? It may be. Often, we forget safety when we ride in familiar surroundings and that is what leads to trouble.

How old is old enough?

There is no 'magic age' at which a bicyclist becomes safe. Some ten year olds are accomplished road users, while some adult riders are 'accidents looking to happen.' Nevertheless, it can be said that before the age of ten, few kids can really understand traffic. They can be taught certain specific skills but they will have trouble understanding concepts like "right-of-way."

If you are an experienced cyclist, you can take your child out for training rides. Such an approach has been known to work with very youg kids but, alas, there aren't that many parents out there who are skilled bicyclists. If you aren't one of the 'lucky few,' the best thing to do is to lay down some ironclad rules and to help your child learn some specific lessons. First, the rules:

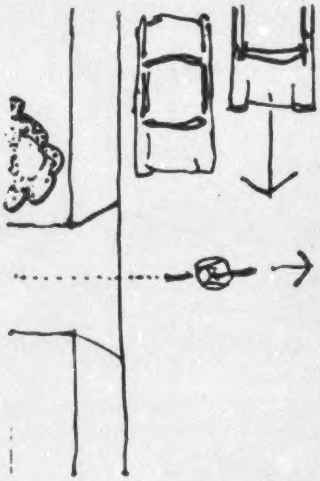
1. No playing on the road.
2. No riding on busy streets.
3. No riding at night.
4. Stop for all stop signs.
5. Ride on the right *with* traffic.
6. Make your own decisions.

As for the lessons, they are given in the following section and each one relates to a *real* problem that children have riding their bikes.

Accident facts

Now that we've exposed some myths, let's look at what *really* happens out on the road. First, the majority of bike accidents do *not* involve cars. Most are falls, collisions with stationary objects, collisions with other bikes or collisions with pedestrians.

Fortunately, most of these accidents aren't serious but they can be. Bike riders have been killed running into posts or hitting each other. But by and large, the most serious accidents are car/bike collisions. The following are the most common:



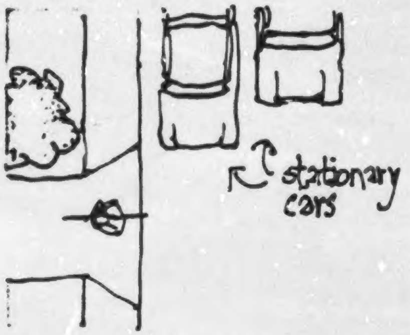
1. *Driveway rideout:* When a youngster rides out of the driveway and gets hit by a car, that's a 'rideout' accident. This type accounts for about 8% of all car/bike collisions and it gets kids early: the median age is *less than ten.*

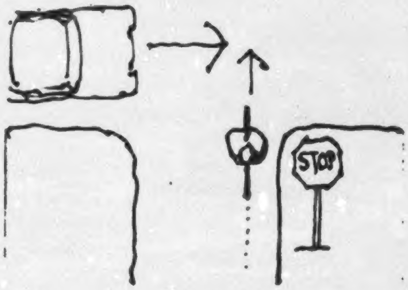
What you can do: First, realize the danger of your own driveway. If there are obstructions to the view of passing motorists (like bushes or trees) trim them back. You might park your car *in front of the driveway*, if local ordinance permits. This way, your child can't use it as a launching pad.

The most important thing you can do, however, is to teach yur child about driveway safety. Take your child outside to the driveway and have him or her practice the following steps:

1. Stop before entering the street.
2. Scan left, right and left for traffic.
3. If there's no traffic, proceed into the roadway.

After this practice, set up the situation shown in the diagram below. Have the child alternatively ride out of the driveway in front of the 'approaching car' and sit in the driver's seat while a friend rides out of the driveway. Have him or her talk about what happens when a bicyclist rides out of the driveway without stopping or looking. Some play-acting might help get the point across too: pretend the car is moving.



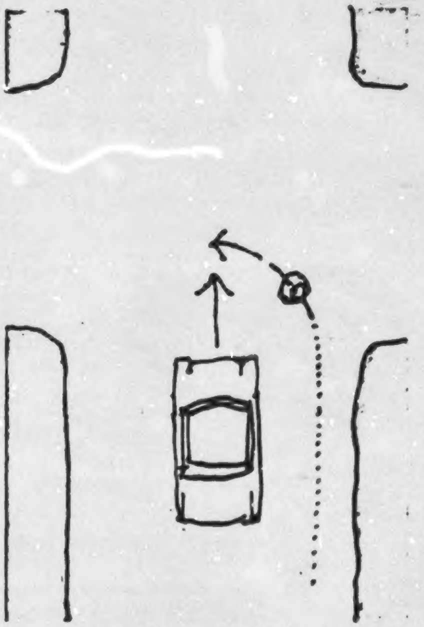


2. *Running the stop sign:* About ten percent of the car/bike crashes happen when the bicyclist runs a stop sign. It happens to fairly young kids, too: the median age is about eleven. Oddly enough, most of the riders who get hit riding through stop signs *know* that they are supposed to stop. They just don't see *why*...or they get distracted. The thing to impress upon your child is that, while he or she may not get hit every time, running stop signs will eventually result in an accident.

What you can do: Take your child to a stop sign near home. Explain what it means emphasizing the following points:

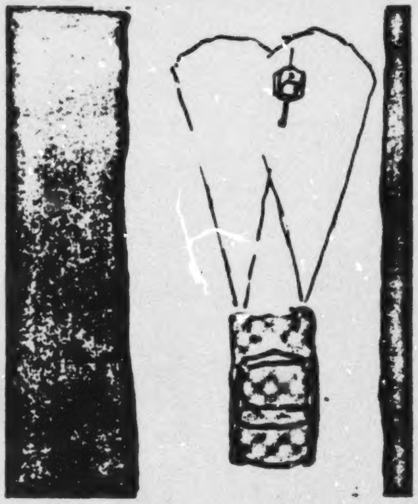
1. Stop at all stop signs regardless of what is happening.
2. Scan both directions for traffic.
3. Wait for any cross traffic to clear.
4. Proceed when safe.

In order to make this lesson stick, you may have to change your own riding or driving habits, though. If you creep through stop sign controlled intersections, the child will pick this up and learn that you don't really believe what you preach. For your child's sake, stop at stop signs.



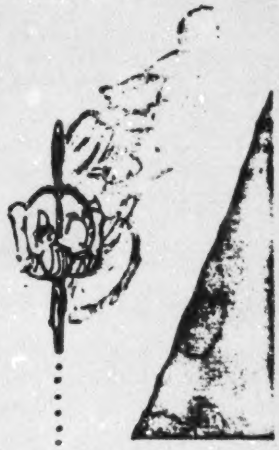
3. *Turning without warning:* Another major accident type involves bicyclists who make unexpected left turns. They neither scan behind for traffic nor do they signal. This accident type accounts for about 10% of all car/bike collisions and the median age is about twelve years. The key factor here is *neglecting to scan to the rear.* If the cyclists had looked, they would have seen the cars coming up from behind.

What you can do: Of course, you ought to teach your child to walk across busy streets —at least until he or she has had some advanced training and is old enough to understand traffic. But in the meantime, for residential street riding, you can teach your child to *always scan and signal before turning left.* A big part of this lesson is teaching the child *how* to scan to the rear without swerving. Take the child to a playground to practice riding along a straight paint line while scanning behind. Stand alongside and hold up two fingers on your hand after the child rides by. Call his or her name. After fifteen minutes of practice a ten year old should be able to look behind and identify how many fingers you are holding up—all without swerving!



4. *Night-time riding:* Certain types of accidents happen most often after dark. For example, most crashes in which a car coming up from the rear hits a bike while overtaking happen at night. These 'overtaking' accidents can be very serious. About 25% of all fatal car/bike collisions are of this type. Most, however, involve older cyclists; the median age is about twenty years.

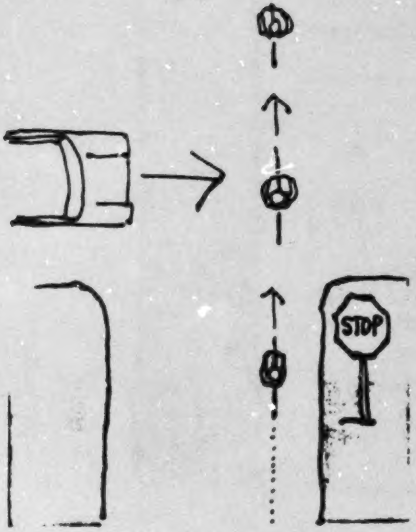
What you can do: First, you can rule out night-riding for your youngster. It requires special skills and special equipment. Few kids have either. Make your child understand that, if he or she gets caught out after dark on a bike, the only thing to do is to call you for a ride home. Maybe you could tape 'phone money' to the bike so that, in an emergency, your child would be able to call.



For adults or teenagers, night-riding can be done safely. The first requirement is to use *bright* lights and reflectors, and to wear light-colored clothing with reflective tape. The second requirement is to remember this tip: at night, watch your shadow in the headlights of overtaking cars. If your shadow moves to the right as the car approaches from the rear, this means it is moving left to pass you. If your shadow stays right in front of you, it means the car is headed straight for you. Get out of the way!

BEST COPY AVAILABLE

BEST COPY AVAILABLE



5. *Following the leader:* Many car/bike colli-ons take place when children are following ch other. The first one may run a stop sign d get through. The second one may get hit. veral different accident types involve this roup think' behavior and it is hard to ounter.

What you can do: Teach your child to always assess the traffic situation for him or herself. When a group is riding around, each cyclist should stop for stop signs. Each one should scan to the rear before making left turns. One good way to get this message across is to play a game with the child similar to "Simon Says." In this game, however, the emphasis should be on *not* doing what Simon says but making a decision based on the situation. For example, you may position your child at the driveway and say "Simon says ride out" when cars are coming and when they are not. The child should learn to ignore what "Simon Says." (Of course, you should be in a position to grab the child before he or she does ride out just in case!)

What about helmets?

Helmets can save lives. About 75% of all bicyclists who die each year die from head injuries. Many more are permanently impaired as the result of hitting their heads. Whether you buy a bike helmet for your child is up to you but the cost ($25-35) is awfully small when compared with the medical bills and possible grief from a head injury. Go with a hard-shell bike helmet; there are several available in kids' sizes.

When should these lessons be taught?

In general, the earlier the better. While the *median* age of most of the bike accidents discussed is about ten years, this means that *half of the bicyclists involved were younger than ten.* Only you know how much your child can understand but the lessons on "driveway rideouts" and "running the stop sign" ought to be taught early: five to seven would be about right. For kids younger than that, it may be best to make them ride on the sidewalk and walk across the street if they have to cross.

By age nine or ten, a child will be able to handle some of the more advanced ideas like making safe left turns on residential streets. This should not, however, keep you from teaching your child to scan behind without swerving. Such skills require practice and need to be taught at an early age.

©1981, Bicycle Forum Magazine. This publication may not be reproduced in whole or in part by any means without the expressed written permission of the author and Bicycle Forum Magazine.

For more information

If you have questions or comments, write to the author at the following address:

Bicycle Forum Magazine
Box 8311
Missoula, Montana 59807
(406) 728-4497

About the author

John Williams, Editor-in-Chief of Bicycle Forum Magazine has worked at all levels of government on bicycle safety. He has taught workshops for the National Highway Traffic Safety Administration, and the Federal Highway Administration. In his present capacity as "Bicycle Safety Coordinator" for the City of Missoula, Montana, he has helped teach cycling to elementary school kids and university age adults. He is a Certified Instructor of *Effective Cycling*, the national program of the League of American Wheelmen.

EDUCATION

ATTACHMENT C

ON-ROAD TRAINING
IN MONTANA
AN ARTICLE FROM
BICYCLE FORUM MAGAZINE

Reprinted with permission of Bicycle Forum Magazine. Reproduction by any means without the expressed written permission of Bicycle Forum is prohibited. Copyright 1981 Bicycle Forum Magazine.

On-Road Training is coming fast! Part 2:

MONTANA

by John Williams

Spring of 1980 saw the successful testing and implementation of the Missoula Bicyclist Training Program, with over five hundred fourth-grade kids directly affected. This is the first American education program directed at young cyclists to combine on-road/on-bike training, classroom instruction, a sound analysis of the appropriate data, good educational theory, before-and-after control group evaluation, in-depth teacher training, and implementation in all schools in a district. The State Highway Traffic Safety Division administrators who funded the project are so convinced they've backed a winner that they are sending Program Director Roger DiBrito around the state to train teachers in other communities.

The program, the culmination of several years of effort, was developed as a cooperative effort between the City of Missoula's Bicycle Program, School District One staff, the State Office of Public Instruction, the above-mentioned Highway Traffic Safety Division, and several consultants. It incorporates the principles many of us have been espousing for the past decade, but goes beyond as well.

Since the program was directed by educators with advice from bicycling specialists, it combined the appropriate messages (derived from, among others, the Cross/Fisher accident study[1]) with an understanding of how kids learn. Roger and Sharon DiBrito are primarily responsible for the approach used, with their extensive experience in elementary-level teaching. Roger is a physical education teacher with graduate training in curriculum development, and Sharon, the director of a day-care center, has a degree in child development, and elementary classroom experience.

Their approach emphasizes on-bike training through directed, self-paced exploration. While some courses simply line the kids up in rows and run them through their paces, the Missoula Program lets the kids practice each exercise on their own before having to 'perform.' According to the DiBrito's, this gives the students a chance to make mistakes without embarassment. It also allows for more efficient use of time and less boredom, since the youngsters can all practice at the same time.

Overview

One of the first on-bike experiences, Traffic Mix, puts the students within a defined area on the playground, where they first walk, run, then ride in a random fashion. They are discouraged from moving in regular group patterns in order to impress upon them how much more difficult it is when there are no rules. The kids also get lots of practice at scanning as they attempt to avoid collisions.

The rationale for this lesson is based on the evidence[2] suggesting that drilling young students in the rules of the road may not affect their behavior. Children need to understand why there are rules, and how to operate within them. In this on-bike session, the kids learn the consequences of not having any rules, thus setting the stage for learning the rules in future sessions.

At each stage, on-bike lessons are complimented by in-class presentations and discussions of such topics as hazard identification, reaction time and defensive driving, emergency turns, traffic flow, driveways, high traffic intersections, controlled environment scanning, and route selection. These sessions are taught by classroom teachers using slides to stimulate discussion. When asked whether he thought packaged slide tape shows wouldn't be better than live teacher-led discussions, Roger replied that "the teacher knows the kids better than anyone else. No taped voice will have as much influence."

Until recently, the DiBrito's used the Traveller's Insurance film "It's Your Move"[3] to underscore the lesson on emergency turns and rock dodging. While admitting that the film shows important accident-causing situations, Roger now feels that the film tends to produce a "crisis" atmosphere. "In the course, we try to teach kids how to avoid situations by being aware. This film,

the Montana Bicyclist Training Program's 15 lessons:

1. **Bicycle Sizing/equipment check** Demonstration of how to size the bike for the rider; safety 'quick check' of equipment.
2. **Traffic Mix** Students are told to walk within a prescribed area in a random fashion; they next run, walk their bikes, and finally ride in the same area.
3. **Hazard Identification** In-class session on identifying critical hazards to cycling.
4. **Stopping** Demonstration and practice in controlled 'emergency' stopping.
5. **Reaction Time** In-class session demonstrates how long it takes to react to an emergency.
6. **Rock Dodging** On-bike lesson which teaches the students to dodge hazards without weaving excessively.
7. **Emergency Turns** Classroom session demonstrates the technique for turning quickly using what had been taught in rock dodging lesson.
8. **Scanning to the Rear** On-bike training teaches the students to look behind without swerving.
9. **Traffic Flow** In-class introduction to traffic principles.
10. **Driveways** Avoiding a very common accident; in-classroom.
11. **Residential Intersections** On-road expedition to a local residential intersection for observation and practice.
12. **High Traffic Intersections** In-class discussion of hazards of high traffic volume roads and strategies for dealing with them.
13. **Route Selection** In-class exercise in choosing a safe route to get to popular destinations.
14. **Controlled Environment Scanning** In-class practice in observing critical details of cycling environment quickly and accurately.
15. **Tour of the neighborhood** Putting all of the knowledge and skills together in an on-road lesson with many right and left turns.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

however, shows a young cyclist riding right into near collisions, from which he can extricate himself only by drastic action."

Survival skills are not ignored, however; three on-bike sessions teach emergency stopping, rock dodging, and scanning to the rear. The first two are patterned after lessons taught in John Forester's *Effective Cycling*,[4] the source for many of the cycling principles of the program.

The scanning lesson is one of the most successful, putting to rest the debate about whether people can be taught to scan to the rear. While experts like Ken Cross have speculated that swerving is the inevitable result of looking over one's shoulder,[5] Roger, with a background in movement training, thinks that it is just a matter of teaching the muscle groups how to do it. The lesson starts with paired student practice: one holds the bike up by the handlebars while the other sits in a riding position. The rider is instructed to look quickly to the rear and describe everything seen. The next phase of this lesson involves the pairs while riding. One follows the other around the playground with a set of flash cards mounted on the handlebars; on command, the front rider looks to the rear and identifies the color of the card being shown. The rear rider flips to the next card and calls again. The students thus learn to navigate while scanning.

After this practice, the kids are ready to perform. They line up at one end of a three foot lane along which several adult volunteer assistants are standing. As the cyclist rides down the lane, the helpers call her or his name. This is the signal to look behind and identify the flash cards. To complicate the task, helpers stand on either side of the lane, requiring the students to practice looking over each shoulder.

On-road Sessions

Of the seven on-bike lessons, two are conducted on the street. The first is a trip to a residential interesection. The students ride their bikes, under the supervision of the instructor, to a nearby low-volume intersection with some sort of traffic control—generally a stop sign. They park their bikes and watch motorists drive through the intersection; the kids apply what they learned in class about signalling, stopping, and scanning as they critique the adults' performance.

Next, the students practice approaching the intersection, stopping, making turns, scanning, and signalling. This practice is a crucial aspect of the program, since the kids have to put it all together. In the left turn exercise, they have to scan to the rear, yield if necessary, signal, move left, signal again, stop, wait for a break in traffic, and then turn. While this sequence is not beyond the capability of a fourth grader, it does require practice and close teacher involvement. The relative difficulty of getting this lesson across points up the inadequacy of most classroom programs. Merely telling students what to do and showing them how in a movie may affect their performance on a written exam, but it is unlikely to make them respnsible road users. Basic to the Missoula Program is the philosophy that in cycling, the best way to learn is by doing.

Roger DiBrito, Program Director, and Maureen Wirth of Denver watch as students participate in the "Traffic Flow" lesson.

Students practice the "Ro [illegible] to miss [illegible] without swerving.

The Montana Program: On-bike training through self-paced exploration.

The other on-road exercise takes the students farther afield, on a tour of the neighborhood. They encounter many intersections and situations, and deal with them in the manner in which they have been taught. As in the previous lesson, the instructor closely observes, evaluates, and corrects the performances of the students. This is only possible in a small group; all on-road lessons are run with a maximum of eight students per instructor. Assistant instructors from the bike club are also enlisted.

Teacher Training

This course obviously makes substantial demands on the instructors. To prepare them for the task, classroom teachers go through a six-hour training session in which they learn something of accident causation, hazard avoidance, and the procedures for teaching their sessions. They are equipped with a manual that outlines each lesson, the objectives, and the activities. The audio-visual presentations are accompanied by a script describing the points to be made with each image.

Merely telling students what to do and showing them how in a movie may affect their performance on a written exam, but it is unlikely to make them responsible road users.

Mark Cadwallader guides his group of fourth-graders through the "Tour of the Neighborhood" lesson.

The teachers of the on-bike sessions are given a more rigorous course, lasting 20 hours. They learn details of accident causation and are run through each lesson, both on-bike and classroom. Much of their training is on the bicycle since they will demonstrate each lesson for the students. Most are PE teachers who have had to teach a wide variety of activities, from soccer to modern dance; while they may not end up expert bicyclists, they are able to pick up enough skills to teach the program to the fourth graders.

Making the program more attractive for the instructors are the credits they can get. The DiBrito's were able to persuade the officials of Western Montana College to offer successful trainees two graduate credits for completion of the course. One professor from Eastern Montana College called this a "coup," but that institution recently offered the same incentive for Billings teachers completing the course.

Results of the program

Basic to the Missoula program was an evaluation[6] done during the Spring 1980 sessions. The team tested three different versions of the program against a control group that didn't receive any training. One variation involved only six lessons, none of which were on-bike; another contained twelve lessons, four of which were on-bike but not on-road. The last version included the full twenty lessons, with seven on-bike and three on-road.

The results are interesting, but not surprising. The students with more training outperformed the others in most tests, including written exams and quizzes. This last result, according to Roger, shows one of the benefits of physical activity; quoting from several studies[7], he says that students who are physically active are better able to learn in the classroom. While admitting that the evaluation did not measure differences in physical activity between the groups, he emphasizes that effective learning involves all the senses. Those senses get a good workout in the Missoula Bicyclist Training Program.

The program's future

At present, the DiBrito's are taking the course all over the state as the *Montana Bicyclist Training Program*. This spring it is being run in Billings, Butte, Bozeman, Helena, Kalispell, Havre, and Missoula. Teachers are being trained and provided with all materials under a grant from the State Division of Highway Traffic Safety. Meanwhile, in Missoula, where the program is part of the curriculum, teachers are busy training a new crop of fourth-graders.

According to Roger DiBrito, that is how it should be. He sees no virtue in creating a continuing dependency upon his services, wishing, rather, to provide the tools for teachers to do that which they do best—teach.

BF

Footnotes

1. **A Study of Bicycle/Motor-Vehicle Accidents: Identification of Problem Types and Countermeasure Approaches**; by Ken Cross and Gary Fisher; USDOT/NHTSA; Sept. 1977.

2. See, for example, the above-mentioned study's discussion of stop sign violations. Only one accident victim interviewed afterwards claimed not to know that bicyclists were required to stop at signs.

3. **It's Your Move**; available from Traveller's Insurance Company, Marketing Services Dept., 1 Tower Square, Hartford, CT 06115; free loan basis or for sale for $65 per copy.

4. **Effective Cycling**; by John Forester; available from the author for $8.00; 726 Madrone, Sunnyvale, CA 94086.

5. Conversation with the author, 1978.

6. **Missoula Bicycle Training Program: Final Evaluation Report**; John Walkenbach & Elliot Hewitt; July 1980.

7. cf, **Active Learning**; Bryant J. Cratty; Prentice-Hall; 1971 and **Developmental Movement**; M. Mosston; Charles Merrill Books; 1965.

Note:

Copies of the **Montana Bicyclist Training Program** can be ordered for $10.00 from the Montana Bicyclist Training Center, Rt. 1, Box 67, Florence, MT 59833.

BEST COPY AVAILABLE

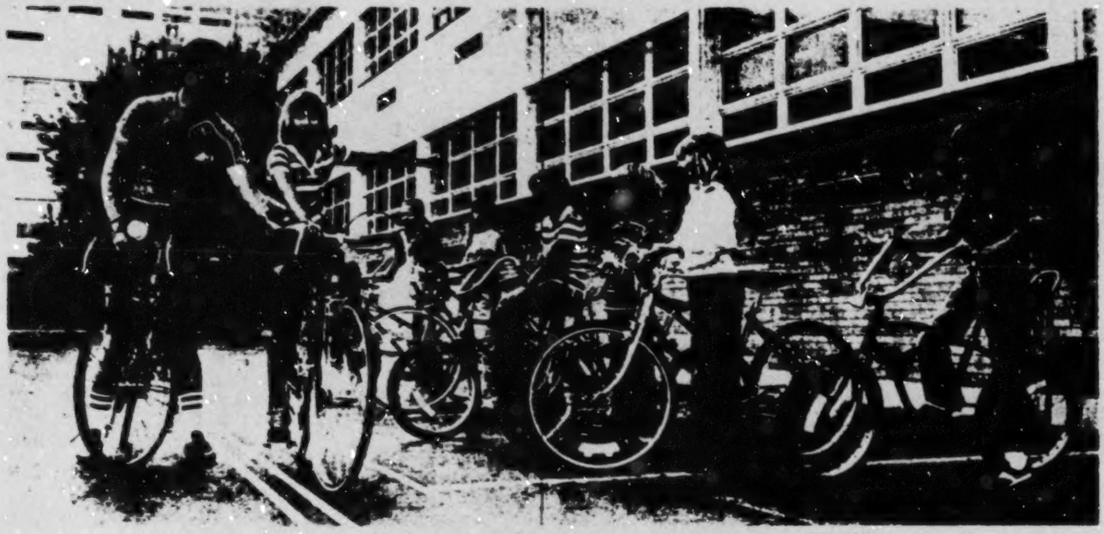
EDUCATION

ATTACHMENT D

A BROCHURE DESCRIBING
THE COMPREHENSIVE BICYCLIST
EDUCATION PROGRAM

What IS CBEP?

The Comprehensive Bicyclist Education Program (CBEP), designed by Mountain Bicyclists' Association and funded by the Gates Foundation, represents an exciting, new hands-on approach for training safe, efficient and enthusiastic young riders. Based on the philosophy that "experience will always be the best teacher," CBEP puts the student on-bike as well as in class in order to teach him/her the skills necessary to safely react in most traffic situations. The program also stresses the many positive aspects of bicycling and leaves the students with the knowledge that cycling is a valuable lifetime activity providing energy efficient transportation, good exercise, and fun.



Why Is CBEP Needed?

Between 1975 and 1978, 2,515 cyclists under the age of 18 were injured in bicycle-motor vehicle collisions here in Colorado. Data shows that 75 percent of such accidents could be avoided by a properly trained cyclist. CBEP offers the training our children need to cope with traffic and to respond to life threatening situations on their bicycles.

What Makes CBEP Better Than Existing Bicycle Education Curricula?

- Many bicycling programs are based on the common sense or intuitional approach to education; CBEP is founded on sound scientific research into the causes and prevention of bicycling accidents.
- Existing programs almost universally rely on behind-the-desk instruction; CBEP offers students on-bike instruction in the safe, controlled atmosphere of the school playground.
- Traditionally, bike education has been a game of "dont's," leaving the student with a negative feeling toward cycling; CBEP teaches the "do's," stressing the positive aspects of cycling — fitness, energy conservation, and fun.

BEST COPY AVAILABLE

How Do I Get More Information About CBEP?

Simply fill out the following coupon or call us at (303) 333-BIKE. We will arrange for one of our staff members to talk to you about the program and how it might be tailored to your students' needs.

Mountain Bicyclists' Association
1290 Williams Street, Denver, Colorado 80218
Phone 333-BIKE

I am interested in hearing more about CBEP and how it can benefit my students. Please contact me.

School District or Recreation Department Name

Address City Zip

Contact Person Daytime Telephone

BIKE ROUTE
NO PARKING ANY TIME

About Mountain Bicyclists' Association

Mountain Bicyclists' Association (MBA) is a non-profit organization founded in 1977 to serve the bicycling public. Our goal is to encourage urban bicycle use as an energy efficient, non-polluting alternative to the private automobile. In addition to designing the Comprehensive Bicyclist Education Program, our activities include clinics (bicycle maintenance and operations), local advocacy, the production and dissemination of bicycle access maps and technical assistance to communities on the design of cost-effective bicycle route systems and program development. Our efforts are funded through membership fees, contract charges and development grants from foundations.

MBA
MOUNTAIN BICYCLISTS' ASSOCIATION
1290 Williams Street Denver, Colorado 80218

BEST COPY AVAILABLE

EDUCATION

ATTACHMENT E

TABLE OF CONTENTS
FROM JOHN FORESTER'S
EFFECTIVE CYCLING COURSE

JOHN FORESTER

EFFECTIVE CYCLING

THIRD EDITION

CUSTOM CYCLE FITMENTS
726 MADRONE AVE
SUNNYVALE CA 94086
408-734-9426

BEST COPY AVAILABLE

TABLE OF CONTENTS

INTRODUCTIONS

COURSE DESCRIPTION AND OUTLINE

SECTION 1 THE BICYCLE

- 1.1 BICYCLES AND ACCESSORIES
  - 1.1.1 Bicycle Selection
  - 1.1.2 Bicycle Tools Required
  - 1.1.3 Cyclist Clothing
  - 1.1.4 Helmets and Head Protection
  - 1.1.5 Shorts and Chamois
  - 1.1.6 Cleats
  - 1.1.7 Saddles for Women

- 1.2 STEERING AND HANDLING
  - 1.2.1 How Bikes Steer
  - 1.2.2 Steering and Handling
  - 1.2.3 Steering and Handling Summary
  - 1.2.4 Selecting a Bike
  - 1.2.5 What to Look For--Road Testing
  - 1.2.6 Steering Troubles

- 1.3 SAFE BRAKES, ADJUSTMENT AND USE
  - 1.3.1 Quick Stop Testing
  - 1.3.2 Basic Rim Brake Test
  - 1.3.3 Brake Adjustment
  - 1.3.4 Brake Repair
  - 1.3.5 Auxiliary Levers
  - 1.3.6 Wet Weather
  - 1.3.7 Downhill Speed Control
  - 1.3.8 Two Wheel Brakes
  - 1.3.9 Centerpulls vs Sidepulls
  - 1.3.10 Hydraulic Brakes; Slippery Cables

- 1.4 GEAR CALCULATION
  - 1.4.1 Gear Mechanical Principles
  - 1.4.2 Learn Your Gears
  - 1.4.3 Correct Gearing Selection
  - 1.4.4 The Logarithmic Gear Chart
  - 1.4.5 Exact Gear Selection
  - 1.4.6 Using Your Gears Correctly
  - 1.4.7 Hub Gear Adjustment

- 1.5 DIMENSIONAL STANDARDS

- 1.6 FEDERAL BICYCLE "SAFETY" REQUIREMENTS

- 1.10 BICYCLE MAINTENANCE
  - 1.10.1 Maintenance of Wired-On Tires
    - 1.10.1.1 Proper Inflation
      - 1.10.1.1.1 Modifying Schrader Valves
      - 1.10.1.1.2 Tire Pumps

1.10.1.2 Rim Types
1.10.1.3 Mounting & Dismounting Tires
1.10.1.4 Repairing Tubes
1.10.1.5 Repairing Casings
1.10.1.6 Preventing Tube Failures
1.10.1.7 Rim Tape for Elan-Type Rims

1.10.2 Maintaining Tubular Tires
1.10.3 Bicycle Cleaning and Lubrication
1.10.4 Bearing Maintenance
1.10.5 Derailleur Adjustment
1.10.6 Rims and Spokes
1.10.6.1 Wheel Trueing
1.10.6.2 Wheel Building
1.10.7 Cranks and Chainwheels
1.10.8 Chains
1.10.9 Leather--Saddles and Toestraps
1.10.10 Freewheels
1.10.11 Replacing Wheels
1.10.12 Matching Hubs to Fork Ends

SECTION 2 THE CYCLIST

2.1 BASIC POSTURE, PEDALLING TECHNIQUE, & MANEUVERS
2.1.1 Posture
2.1.2 Saddle Selection
2.1.3 Saddle Soreness
2.1.4 Saddle Height and Bike Size
2.1.5 Very Basic Maneuvers
2.1.6 Pedalling Technique and Cycling Style
2.1.7 Looking Behind & Rear-View Mirrors

2.2 EMERGENCY MANEUVERS
2.2.1 Track Stands
2.2.2 Rock Dodging
2.2.3 If You Touch Wheels
2.2.4 Turning
2.2.5 Instant Turns
2.2.6 Panic Stops
2.2.7 Braking Cautions

2.3 KEEPING YOUR BODY GOING
2.3.1 Muscle Strength
2.3.2 Muscle Energy With Oxygen
2.3.3 Muscle Energy Without Oxygen
2.3.4 Heat Control, Sweating, Water and Salt
2.3.5 Food For Energy
2.3.6 Long Term Energy
2.3.7 Aches and Pains

2.4 THE PHYSIOLOGY AND TECHNIQUES OF HARD RIDING

BEST COPY AVAILABLE

SECTION 3 THE CYCLING ENVIRONMENT

3.1 THE WHYS AND WISDOM OF TRAFFIC LAW
  3.1.1 Principles and Statutes
  3.1.2 Drivers and Pedestrians
  3.1.3 Conflict or Cooperation?
  3.1.4 First Come, First Served
  3.1.5 Right of Way at Intersections
  3.1.6 Superior and Inferior Roadways
  3.1.7 Traffic Signals
  3.1.8 Driving on the Right
  3.1.9 Overtaking and Being Overtaken
  3.1.10 Special Maneuvers Signals
  3.1.11 Channelization
  3.1.12 Notification of Special Restrictions
  3.1.13 Human Abilities and Traffic Rules
  3.1.14 Summary

3.2 CYCLING ACCIDENTS
  3.2.1 Basic Accident Rate
  3.2.2 Accident Types, Frequencies and Cyclist Skill
  3.2.3 Types of Falling Accident
  3.2.4 Car/Bike Collisions
    3.2.4.1 Motorist Overtaking Car/Bike Collisions
  3.2.5 Car/Bike Accidents Without Collision
  3.2.6 Bike/Bike Collisions
  3.2.7 Dog/Bike Collisions
  3.2.8 Parked Car Collisions
  3.2.9 What Happens in an Accident
  3.2.10 Helmet Action
  3.2.11 Summary

3.3 WHERE TO RIDE ON THE ROADWAY
  3.3.1 Wrong Way Riding Is Dangerous
  3.3.2 The Basic Rules of Law
  3.3.3 How Wide Is The Road?
  3.3.4 Very Wide Boulevards
  3.3.5 Wide To Narrow
  3.3.6 Parked Cars
  3.3.7 Narrow Road With Narrow Lanes
  3.3.8 Intersections
  3.3.9 Right-Turn-Only Lanes
  3.3.10 Right-Turn-Only Bicycle Lanes
  3.3.11 As Fast As The Cars
  3.3.12 Cyclists' Lane Rule

3.4 AVOIDING STRAIGHT ROAD HAZARDS
  3.4.1 Overtaking Errors by Motorists
  3.4.2 Incipient Head-Ons
  3.4.3 Wind Blast
  3.4.4 Sun Glare, Hill Crests, Blind Curves
  3.4.5 Curbs, Chuckholes & Railroad Tracks
  3.4.6 Slots, Ridges & Diagonal Railroad Tracks

BEST COPY AVAILABLE

3.4.7 Slippery Places
3.4.8 Pillars, Posts & Barricades
3.4.9 Moving Obstructions--Dogs, Balls, Children

3.5 CHANGING LANES IN TRAFFIC
3.5.1 Fear Or Confidence
3.5.2 Slow Speed Lane Changes
3.5.3 Medium Speed Lane Changes
3.5.4 Changing Lanes in High Speed Traffic
3.5.5 Last Resorts
3.5.6 Allow Time and Distance
3.5.7 Things To Remember

3.6 RIDING THE INTERSECTIONS
3.6.1 Straight Through
3.6.2 Stop Signs
3.6.3 Traffic Signals
3.6.4 Turns and Channelization
3.6.5 Right Turns
3.6.6 Left Turns
3.6.7 Avoiding Motorists' Intersection Errors
3.6.7.1 Motorist Left Turns
3.6.7.2 Motorist Right Turns
3.6.7.3 Stop Signs and Signals
3.6.8 Bikeway Intersections
3.6.9 Merges, Diverges, Unions and Separations
3.6.9.1 Diverges To Left
3.6.9.2 Merging From Left
3.6.9.3 Separation To Left
3.6.9.4 Union From Left
3.6.10 Summary

3.7 RIDING AT NIGHT
3.7.1 Equipment Requirements
3.7.2 Location
3.7.3 Batteries Or Generator?
3.7.4 Reflectors
3.7.5 Need A Bicycle Look Like A Bicycle?
3.7.6 Mounting Brackets
3.7.7 Spare Bulbs
3.7.8 Generator Modifications for High Speed & Tubular Tires
3.7.9 Wiring
3.7.10 Generator Alignment
3.7.11 Lamp Adjustment
3.7.12 Riding At Night

3.8 RIDING IN THE RAIN
3.8.1 Mudguards
3.8.2 Rain Clothing
3.8.3 Riding In The Rain
3.8.3.1 Visibility

BEST COPY AVAILABLE

- 3.8.3.2 Brakes
- 3.8.3.3 Slipperiness
- 3.8.3.4 Puddles
- 3.8.4 Comfort

SECTION 4 CYCLING ENJOYMENT

- 4.1 BICYCLE COMMUTING
  - 4.1.1 Bikelanes
  - 4.1.2 Time and Distance
  - 4.1.3 Dual Mode
  - 4.1.4 Theft
  - 4.1.5 Clothing And Sweating
  - 4.1.6 Bike And Equipment
    - 4.1.6.1 Trashmo Bikes
  - 4.1.7 Route Selection
  - 4.1.8 First Ride
  - 4.1.9 Cyclo-Commuting Technique
  - 4.1.10 Overtaking
  - 4.1.11 Intimidation and Education
  - 4.1.12 Non-Commuting Utility Cycling

- 4.2 MOUNTAIN RIDING
  - 4.2.1 Equipment
  - 4.2.2 Planning
  - 4.2.3 Map Reading
  - 4.2.4 Training
  - 4.2.5 Climbing
  - 4.2.6 Descending
  - 4.2.7 An Example: Sonora Pass in the Sierra Nevada

- 4.3 INTRODUCTION TO CLUB RIDING
  - 4.3.1 Why Join A Club?
  - 4.3.2 Finding A Club
  - 4.3.3 Types Of Club
  - 4.3.4 First Club Ride
  - 4.3.5 What To Take
  - 4.3.6 Hard Or Easy? Pick Your Group
  - 4.3.7 Group Riding Technique
    - 4.3.7.1 Signals
    - 4.3.7.2 Downhills
  - 4.3.8 Cycling Clubs and the Craft and Sport of Cycling
  - 4.3.9 Cycling Tradition

- 4.4 INTRODUCTION TO TOURING
  - 4.4.1 The Joy Of Touring
  - 4.4.2 Touring Style
  - 4.4.3 Different Types of Cycling Terrain
  - 4.4.4 Maps
  - 4.4.5 Clothing
  - 4.4.6 Touring Bicycle Type and Equipment
  - 4.4.7 Touring Tools

BEST COPY AVAILABLE

[illegible] Cycle-Camping Equipment
[illegible] Riding With A Load

4.5 INTRODUCTION TO RACING
4.5.1 Types of Racing
  4.5.1.1 Paced or Unpaced
  4.5.1.2 Types of Courses
  4.5.1.3 Individual or Team
4.5.2 Racing Bicycles
4.5.3 Track Races
4.5.4 Criterium Racing
4.5.5 Road Racing
  4.5.5.1 Time Trialling
  4.5.5.2 Massed Start Racing

4.6 INTRODUCTION TO THE POLITICS OF CYCLING TRANSPORTATION ENGINEERING
4.6.1 Cycling Transportation Engineering
4.6.2 Politics
4.6.3 Militant Motorists & Friends of the Bicycle
4.6.4 Arguments for Restricting Cyclists Refuted
4.6.5 Emotions, Not Logic, Power Bikeways and Restrictions
4.6.6 Political Action

4.7 CYCLIST EDUCATION AND THE EFFECTIVE CYCLING PROGRAM

BEST COPY AVA

EDUCATION

ATTACHMENT F

BACKGROUND FROM NHTSA'S FOURTH GRADE COURSE IN BICYCLE DRIVER EDUCATION

A FOURTH GRADE COURSE IN
BICYCLE DRIVER EDUCATION

COURSE GUIDE

Contract No. DOT-HS-7-01726

June 1981

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
Office of Driver and Pedestrian Research
Washington, D.C. 20590

Prepared by:

Dunlap and Associates, Inc.
One Parkland Drive
Darien, Connecticut 06820

II. BACKGROUND

Each year since 1972 about 1,000 fatal and 40,000 non-fatal accidents involving a bicycle and a motor vehicle have been reported to the police in the United States. Additional estimates of unreported bicycle/motor vehicle accidents that produce injuries run as high as 40,000 each year. The increased use of bicycles as an inexpensive means of transportation as well as recreational vehicles intensifies the concern. Recognition of the problem has prompted in-depth research to define the causes of such accidents and to suggest countermeasures.

Notable among studies into the incidence, consequences and causes of bicycle/motor vehicle accidents are those by Anacapa Sciences, Inc., in 1977 for the National Highway Traffic Safety Administration and in 1973 for the County of Santa Barbara in California. The results of the Santa Barbara study were described in a two-volume report published in June 1973 (Cross and deMille, 1973; Popish and Lytel, 1973). One of the principal conclusions reached by the authors was that a significant reduction in bicycle/motor vehicle accidents could only be achieved through a coordinated program of enforcement, engineering and education. The enforcement sanction, naturally, belongs to the local police departments whose responsibility it is to see that traffic laws and ordinances pertaining to bicycles are obeyed. Providing facilities and bikeways for bicyclists is the responsibility of the local department of public works in cooperation with traffic engineers. Providing well-designed bicycles that are as safe as possible is the responsibility of the manufacturing engineers.

The third major element of the countermeasure recommendation was for an educational program. However, responsibility for the design and implementation of such a program is less clearcut than that involved in enforcement and engineering considerations. The growing awareness of the magnitude of the bicycle safety problem did result, initially, in a flood of safety films, comic books, pamphlets and other one-time educational materials designed to teach bicycle safety. A few programs were even designed for use in the public schools. Unfortunately, these early efforts were, for the most part, simplistic approaches which did not address the knowledge and skill deficiencies that lead to bicycle accidents. Now, on the basis of a great deal more empirical data on accident causation, a much more effective course can be structured. The result is this bicycle safety course based on the most recent research and designed to be taught at the fourth grade level in the public schools.

Because the need for this kind of bicycle safety training has only recently emerged, there are as yet few teachers specifically trained in bicycle safety education. For most fourth grade subjects, teacher lesson plans consist of general objectives for each lesson and outlines for achieving them as envisioned by the curriculum developer. This method is viable because the classroom teacher is usually an expert in the subject matter or skill being taught. Since this will not be the case (even assuming that the teacher is an experienced bicyclist) when the bicycle safety course is integrated into the school curriculum, we have included far more content and instructional detail than the teacher is perhaps accustomed to find, e.g., detailed descriptions of the ten major accident situations. The course is designed to provide the teacher with basic knowledge regarding bicycle/motor vehicle accidents as well as how to avoid them. This knowledge is widely applicable, covering the education of bicyclists in urban, suburban and rural areas throughout the United States.

Moreover, understanding the critical behavior that the course is designed to modify and the research methods used to define the behavior is likewise of importance to the teacher. Therefore, the next several pages of this volume will examine at some length the various accident types, along with the typical behavior patterns of both bicyclists and motorists involved in them. It is hoped that this discussion, in conjuction with the expanded lesson plans, will provide the teacher with enough background knowledge to teach the course effectively.

Much of the content for this course was based on the results of the studies mentioned earlier. Briefly, the Santa Barbara study involved looking at a sample of 384 bicycle/motor vehicle accidents which occurred in Southern Santa Barbara County between January 1971 and December 1973. The second study collected data on 753 non-fatal accidents and 166 fatal accidents sampled from all bicycle/motor vehicle accidents in California, Colorado, Florida and Michigan. Accident reports were analyzed in detail, since a great deal of useful information regarding the events and circumstances can be gained from the police narrative which typically includes type of street, location of crash relative to intersection or driveway, traffic control devices, time of day or night, vehicle condition, condition of roadway, visual obstructions and movements of each vehicle prior to crash. In addition, more information was gathered through direct interviews with the individuals involved and on-site investigations.

These efforts had two important results for our understanding of the subject. First, they identified the critical behaviors to be considered and provided some indication of the relative importance of each act in the generation of accidents. Second, they provided information necessary to classify these accidents into meaningful problem types.

With respect to the first product, evidence quickly pointed to the fact that bicycle/motor vehicle accidents were usually precipitated by some form of "operator[1] failure," i.e., the operator failed to do something to avoid the accident or did something which directly caused it. The preponderance of bicyclist and motorist behavioral failures as primary accident causes rather than mechanical failures (inadequate brakes, for example) or environmental failures (poor road suface, heavy rain) has obvious implications for accident prevention programs. It indicated the need for education and, for the bicyclist, an educational approach which emphasized bicyclist behavior, although not by any means to the exclusion of the mechanical and environmental aspects of safe bicycle driving.

A behavioral sequence model developed during studies into pedestrian accidents was found to be useful in the study of bicycle accidents as well. The model is used to define the function/events that occur during the planning and execution of the trip the operator was taking at the time the accident occurred. The trip is divided into three descriptive phases: Preparatory, Anticipatory and Reactive. Each of these phases is discussed below to provide the contextual framework within which this course was developed. It must be remembered, however, that this model is conceptual and does not imply conscious decision-making by bicyclists and motorists in all cases. Certainly, a fourth grader would not be expected to understand the model as a prerequisite for bicycle driving.

---

[1] The term "operator" may apply to either the motorist or bicyclist.

Within each Phase in the model are functions which an operator must perform successfully to avoid an accident. These include the use of the senses, e.g., searching or looking for danger, and the processing of the information provided by the senses, e.g., detecting danger after it is seen. Failure to complete one of these functions successfully may truly be an omission by the operator, e.g., a bicyclist forgets to look for cars when leaving a driveway, or the failure may be caused or "predisposed" by external factors, e.g., a parked vehicle which makes it impossible for a bicyclist to detect an oncoming car even if the bicycle searches properly for it. It is important to note that failures to perform functions successfully in this model are not necessarily equivalent to "fault" in the legal sense. For example, a speeding motorist may be judged legally at fault for an accident, but the bicyclist in it may still have failed to look adequately for oncoming vehicles.

The Preparatory Phase begins when the operator decides to initiate a bicycle trip. During this phase, the bicyclist plans the trip details (starting time and route to follow) and evaluates his/her ability to complete the trip given his/her condition (e.g., skills, dexterity, health), the bicycle's mechanical condition, and the environmental conditions expected (e.g., traffic, weather, terrain). The bicyclist then makes a decision based on competing needs at the moment whether to initiate the trip, postpone it or cancel it. An evaluation or decision failure (incorrect choice) may initiate the chain of events leading to an accident. The lesson devoted to **Inspecting Your Bicycle**, for example, addresses this phase. Preparatory Phase failures are the primary cause of relatively few bicycle/motor vehicle accidents.

The Anticipatory Phase begins when the cyclist starts to perform the functions necessary to drive a course (selected path and speed) through what may be termed the accident area. Course selection involves the repetitive application of six functions—again, not always in a conscious way on the part of the bicyclist.

Search—scanning (looking around in an attempt to see hazards) the environment for the information necessary to select an appropriate course.

Detection—becoming fully aware of elements in the traffic environment that are important for course selection.

Evaluation—processing all the information received and assessing the relative safety of each alternate course.

Decision—choosing the course that fulfills the bicyclist's needs at the moment; the decision may involve a trade-off between the safest route and the fastest route, for example.

Operator Action—performing the perceptual-motor skills necessary to maneuver the bicycle on the course selected.

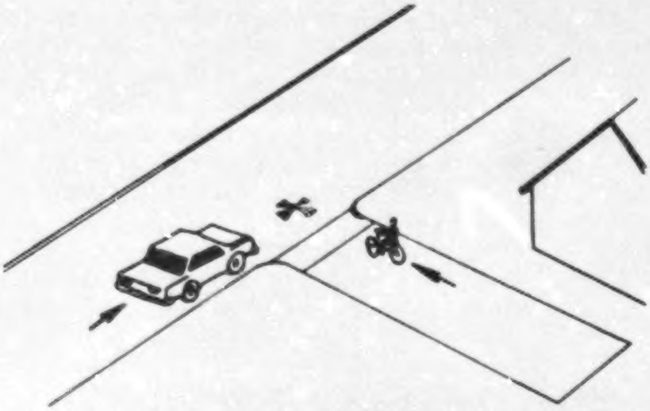
Vehicle Action—responding in the expected way to the bicyclist's control inputs.

Using the Decision Making Process and Knowing Your Surroundings are two examples of lessons which are based on these concepts.

The Reactive Phase of an accident starts at the point when the other vehicle is first observable and ends at the point of collision. Although the functions in this third phase are the same as those above, the objectives differ. Whereas the objective of the Anticipatory Phase is course selection, the objective during the Reactive Phase is collision avoidance. Another difference between them is that failure to perform one function in the Reactive Phase usually precludes the possibility of adequately performing the following functions. For example, if one fails to perform a search in the direction of the other vehicle, one cannot detect it, and therefore, cannot evaluate, etc. **Communicate and Be Predictable** and **Driving a Bicycle** are lessons which reflect these concepts and identify critical behaviors that can potentially be influenced in a classroom setting.

As noted previously, the data accumulated during these two studies also enabled researchers to classify accidents into broad groups or "types." This was accomplished by investigating each accident in detail to identify its main characteristics. Accidents with similar attributes were then grouped together. Ten basic accident situations of primary importance to fourth graders form the basis for case studies in this course. These situations cover both the accident types most prevalent among fourth graders and those which capture the tremendous potential for preventing future accidents by teaching responsible behavior at an early age. A brief look at the characteristics of each accident type is presented below to acquaint the reader with the underlying problems this course is designed to solve. In these descriptions, the bicyclist is said to be "driving" rather than "riding" the bicycle. Although the use of the word drive here may seem inappropriate to the reader, its usage has become accepted, together with the concept that a bicycle is a part of the total traffic environment. It connotes that the bicyclist is an active and responsible participant in this environment.

1. Midblock Rideout



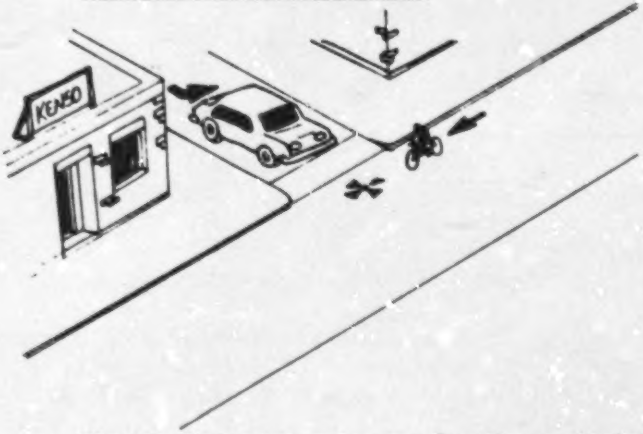
Midblock rideout accidents occur when a bicyclist enters the street from a driveway, from an alley, or over a curb or shoulder and collides with an approaching motor vehicle. In the typical case, the bicyclist rides straight out of a driveway or alley. However, a significant number of **midblock rideout** accidents occur when the bicyclist enters the street from a parallel sidewalk by way of a driveway/alley apron or over a curb/shoulder. Nearly all **midblock rideout** accidents occur during daylight hours at a location near the bicyclist's home.

A distinguishing characteristic of **midblock rideout** accidents is that the bicyclist enters the street without slowing and without searching for approaching motor/vehicle traffic. A second distinguishing characteristic is that the motorist has insufficient time to avoid the accident once the bicyclist is seen and the motorist recognizes that the bicyclist does not intend to stop before entering the street. In some cases, the operators' views of each other are partially or totally obstructed by parked motor vehicles, vegetation, or structures located near the point the bicyclist enters the street, although in a majority of cases the operator's view is not obstructed.

Some important bicyclist failures leading to **midblock rideout** accidents which this course attempts to correct are the failures to:

- Perceive the intersection of a street and a driveway as a potentially hazardous location.
- Perceive the danger inherent in visual obstructions.
- Search for oncoming motor vehicles; this failure may be due to inattention, distractions caused by playmates, being unaware of the need for searching, etc.
- Detect approaching motor vehicles because of ineffective searching.
- Assess correctly the speed of the approaching motor vehicle.
- Drive slowly enough to search and stop if required.

2. Motorist Exiting Driveway



In **motorist exiting driveway** accidents, the motorist, who is driving forward out of the driveway, brings his vehicle to a complete stop and searches the intersecting street for approaching traffic. The motorist performs his search in a manner that would be considered normal for this situation. When the motorist considers it safe, he or she proceeds into the intersecting street without having observed the bicyclist approaching and strikes the bicyclist almost immediately.

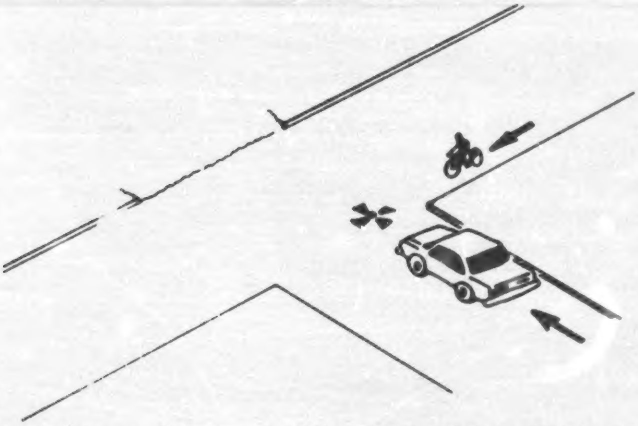
The most common reason for the motorist's failure to observe the bicyclist is that the bicyclist is riding in an unexpected location—on the sidewalk or in the street facing traffic (coming from the motorist's right). Darkness and inadequate bicycle lighting are factors in many of the cases in which the bicyclist is riding with traffic in the street.

In a minority of the accidents, the bicyclists fail to search in the direction of the motor vehicle until it is too late to avoid the collision. In the vast majority of cases, the bicyclist observes the motor vehicle soon enough to avoid the accident but proceeds with the assumption that he or she has been (or will be) observed by the motorist and that the motor vehicle will remain stationary until the bicyclist has passed.

Common failures which this course addresses include:

- Failure to perceive the intersection of a street and a commercial driveway as a high hazard area.
- Failure to search the driveway for exiting motor vehicles.
- Failure to search and/or observe occupants in a vehicle.
- Assumption that the motorist has detected the bicyclist and will let him pass before entering the street.

3. Wrong-Way Bicyclist

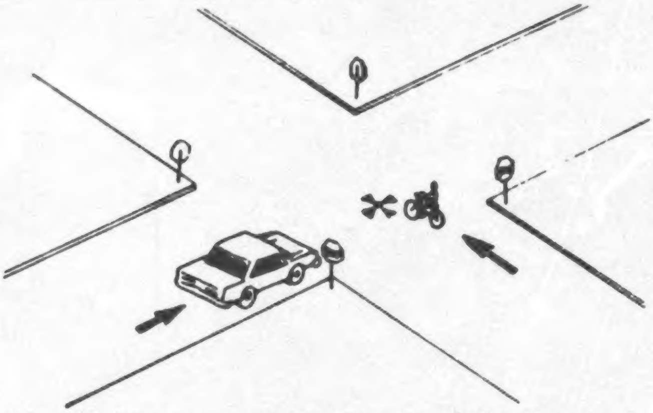


This type of accident occurs in many different traffic contexts when the bicyclist is driving against the flow of traffic. However, the fundamental cause is usually the same. Motorists do not expect a hazard, namely a bicyclist/driver approaching from that part of the roadway. For example, when a motorist is stopped at a traffic sign and is searching the perpendicular street for on-coming traffic, he searches the near traffic lane on his left and the far traffic lane to his right; chances are he would not see a bicyclist driving alongside the curb against the flow of traffic.

It was found that the majority of bicyclists know driving against traffic is unlawful. Some of the reasons why they do so anyway are:

- Instruction from parents or peers to drive against traffic.
- Failure to understand that driving against traffic generates many more dangerous situations.
- Overestimated ability to detect and avoid approaching motor vehicles.
- Strong need to save time and/or energy which they perceive driving against the traffic will do.
- Attitude characterized as competitive, defiant or aggressive.

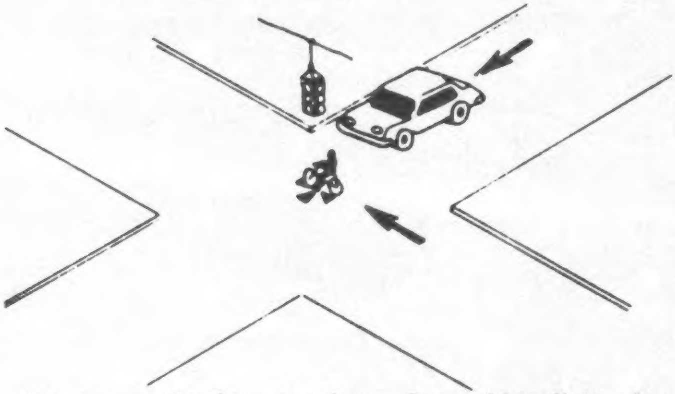
4. Intersection Rideout



This type of accident results when the bicyclist improperly enters an intersection by failing to stop or yield when necessary. **Intersection rideouts** may occur at locations controlled by stop or yield signs, at corners controlled by traffic signals or at totally uncontrolled sites.

In many of the studied accidents, the bicyclist approaching an intersection with a sign or signal recognizes the legal requirement to stop, but does not. Evidence suggests that the failure to stop is motivated by factors similar to those which prompt wrong-way bicycle driving (cited above). In addition, driving too fast for conditions and the poor example set by older bicyclists may influence the improper behavior. It must be noted that the bicyclist's ability to search for and detect threatening motor vehicles is not a cause of this accident type. There is clear evidence that bicyclists can perform a proper search for motor vehicles if they stop before entering an intersection.

5. Trapped-by-the-Signal



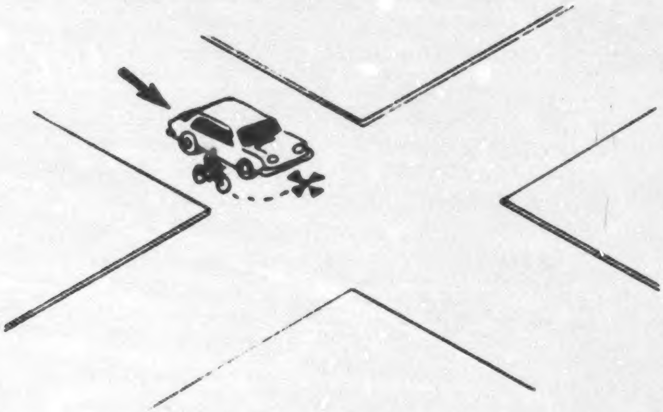
All **trapped-by-the-signal** accidents occur within a signalized intersection. The signal controlling the bicyclist's leg of the intersection is green or yellow at the time the bicyclist enters the intersection, but changes to red before the bicyclist can clear the intersection. The bicyclist collides with a motor vehicle approaching on an intersecting roadway. In all cases, the signal controlling the motorist's leg of the intersection is green at the time he enters the intersection. Some bicyclists observe the signal change from green to yellow; others fail to observe the signal-phase change. In either case, the bicyclist proceeds into the intersection with the assumption that he can clear the intersection before the onset of the red signal-phase. In most of the cases, the intersecting street the bicyclist intends to cross has four or more traffic lanes.

The motorist usually fails to observe the bicyclist soon enough to avoid the accident even though he performs a routine search before entering the intersection. In over half of the cases, the bicyclist fails to search in the motorist's direction until an accident is imminent. In the remaining cases, the operator observes the other vehicle soon enough to avoid the accident but incorrectly assumes that the other operator will stop or yield.

The factors that lead most directly to this type of accident are:

- The bicyclist's entry into a signalized intersection when there is insufficient time to clear the intersection before the onset of the red signal phase (most yellow phases are timed for a car's speed).
- The motorist's entry into the intersection before the intersecting legs of the intersection are clear of traffic.

6. Bicyclist Unexpected (Left) Turn



Prior to a **bicyclist unexpected (left) turn** accident, the bicyclist is riding along the right-hand edge of the roadway, traveling in the same direction as motor-vehicle traffic in the adjacent lane. Without searching to the rear and without signaling, the bicyclist initiates a left-hand turn and collides with an overtaking motor vehicle. The overtaking motorist observes the bicyclist well in advance, but has no time for evasive action once the bicyclist commences his turn. About one-half of the bicyclists turn left at the junction of a roadway or driveway, and the remaining bicyclists initiate their turn at a point that is not in close proximity to any type of junction. **Bicyclist unexpected left-turn** accidents occur on both urban and rural roadways. **Bicyclist unexpected left-turn** accidents do not include cases in which the bicyclist loses control of his bicycle and inadvertently swerves left.

A variation of this accident occurs when the bicyclist makes an unexpected left turn and is struck by a motorist going in the opposite direction. In these cases, the striking vehicle is almost always straight ahead and clearly visible before the bicyclist begins the turn.

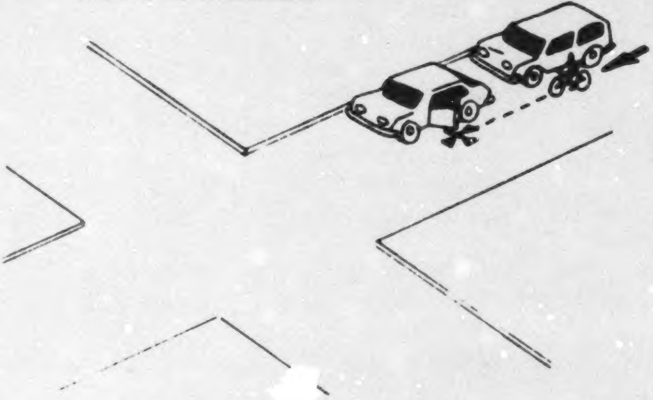
Factors which prompt the bicyclist's improper behavior in these accidents include:

- The bicyclist is distracted by riding companions, game playing, other vehicles or pedestrians.
- The bicyclist is following another bicyclist and assumes the lead bicyclist will search for overtaking traffic and will turn only when it is safe to do so.
- The bicyclist is reluctant to search behind because it is difficult to do so without loss of balance and lateral control.
- The bicyclist knows that the roadway on which he is traveling carries light and sporadic traffic and therefore falsely assumes no one is coming.

- The bicyclist has learned that auditory cues usually signal the presence of overtaking motor vehicles and mistakenly assumes that auditory cues will always signal the presence of an overtaking motor vehicle.

This accident is not caused by a bicyclist's failure to judge the space available for a left turn. In virtually all cases, the bicyclist was not aware that a motor vehicle was dangerously close because the bicyclist simply had not looked for it.

7. Car-Door Opening



Car-door opening accidents occur shortly after a motorist enters a parallel parking space. The motorist typically performs a routine search to the rear and opens the left-hand door of the motor vehicle when it appears safe to do so. The motorist fails to observe a bicyclist approaching from the left rear of the motor vehicle. The bicyclist, who had been riding close to a row of parallel-parked motor vehicles, fails to observe the opening car door until it is too late to avoid colliding with it. The accident most often occurs on narrow, urban streets where the number and turnover of parallel-parked motor vehicles is high. Occasionally, the bicyclist swerves out in a panic maneuver to avoid the open door and is struck by an overtaking vehicle.

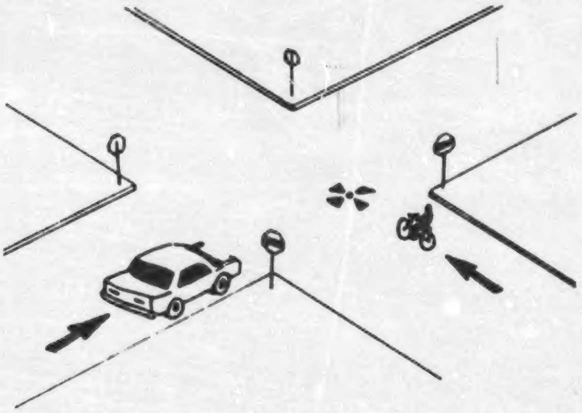
It must be noted that the bicyclist is almost always capable of preventing this type of accident by riding away from parked vehicles and by watching them carefully for occupant actions. Some of the specific bicyclist behavioral errors include:

- Failure to recognize hazards associated with passing parallel-parked motor vehicles.
- Failure to search for clues that indicate the presence of occupants in these vehicles.
- Reaching the faulty conclusion that the occupant(s) of these parked vehicles have detected the bicyclist and will let the bicyclist pass before opening the vehicle's door.

8. Motorist Stop-and-Go

In this accident type the motorist typically makes a legal stop at a signal controlled intersection and then proceeds into the path of an approaching bicyclist.

Although an erroneous judgment of the approaching bicycle speed by the motorist is sometimes a factor in this accident type, it is more often the result of the motorist's failure to detect the bicycle. In some cases this results from poor visibility conditions at the time of the accident: low ambient lighting, (nighttime, dawn, dusk, fog), glare, visual obstructions. poor figure-ground contrast, etc.

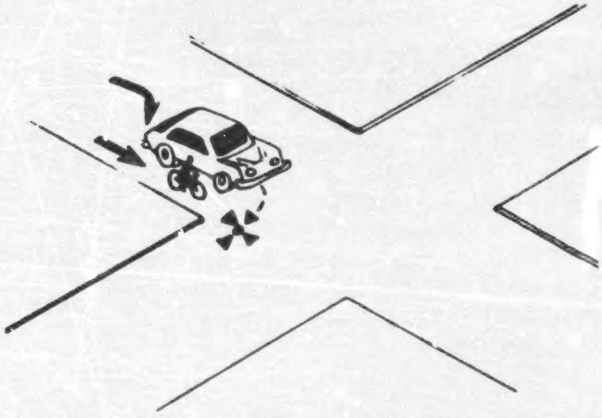


However, in a large number of cases the motorists perform all the appropriate actions (legal stop, search to the the left and right) and still proceed directly into the path of a clearly visible bicyclist. Accidents of this type may be explained by the fact that motorists have a strong expectation that they will see a motor vehicle but not a bicycle or a motorcycle. Motorists may also experience a visual "overload," i.e., too many visual stimuli for the motorist's mind to grasp, process and act upon.

Once again, in terms of errors by the bicyclist, the following can be regarded as contributory:

- Failure to perceive the intersection of two streets as a hazardous area.
- Failure to recognize the implication of obstructions to vision.
- Failure to search cross streets for moving or stopped vehicles.
- Faulty assumption that motorists will always do what is legally required at intersections.
- Faulty assumption that the motor vehicle driver has detected the bicyclist and will wait for the bicyclist to pass before proceeding.

9. Motorist Unexpected Turn



This type is really three different events which are similar because the motorist turns into the path of a bicyclist approaching from the motorist's front or rear. Most often, the motorist does not see the bicyclist before turning, usually because the bicyclist is driving in an unexpected location or in the vehicle's blind spot.

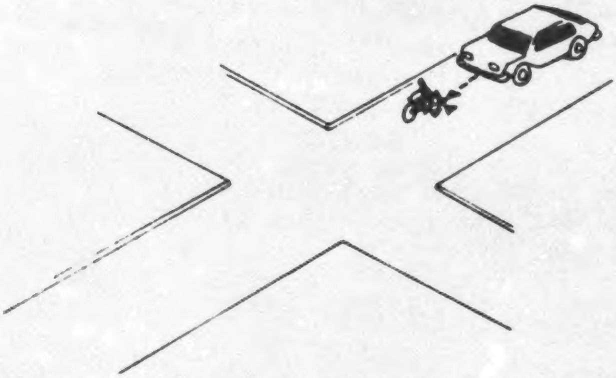
The three sub-types of this accident differ in terms of the direction of the motorist's turn, the bicyclist's position and direction of travel relative to the motorist's, and some causal factors. The most frequent sub-type involves a motorist turning left into the path of a cyclist approaching from the opposite direction. Most often the bicyclist was driving on the right in the roadway, although some cyclists involved in this accident type were driving on the sidewalk before entering the street at the point where the accident occurred.

Although visibility is usually good and the motorist's view is not obstructed, the cyclist is generally not detected by the motorist. While some of the motorists indicated they had indeed searched in the direction of the bicyclist, the failure to detect his presence could be attributed partly to distraction or possibly to visual overload.

The second sub-type of this accident classification involves a collision between a motorist making a right turn and an overtaking bicyclist; often the cyclist approaches from the motorist's right rear and comes up alongside the motorist just as he turns.

In the third sub-type the motorist turns left into the path of a cyclist approaching from the left-rear of the motor vehicle. Sometimes the bicyclist is traveling in the middle of the road in the same direction as the motor vehicle, perhaps preparing for a left turn. In the remainder of the accidents the bicyclist is driving facing traffic, i.e., wrong-way bicycling, along the left-hand edge of the roadway. In the vast majority of cases, the motorist fails to search in the bicyclist's direction before turning because he does not expect to see a vehicle (bicycle) approach from that direction.

10. Motorist Overtake



While this accident type does not often occur among young bicyclists (the median age for the non-fatal group studies was 18.3 years and 20.5 years in the fatal sample), it is, nonetheless, one of the most important problem types because it accounts for nearly one-fourth of all fatal accidents. The distinguishing characteristics of this accident are: (a) the motor vehicle overtakes and collides with a bicycle traveling in the same direction as the motor vehicle, and (b) the collisions occur because the motorist fails to see the bicyclist until it is too late to take evasive action. Contributing factors to the motorists' inability to perceive the bicyclist include: poor visibility (most occur at night), inadequate bicycle lighting, alcohol use by the motorist, operator distractions and excessive speed. Moreover, because of the combined effect of darkness and insufficient bicycle lighting, bicyclists may tend to drive further to the left than they would if they could see to avoid roadway defects and debris. This naturally increases the hazard to the cyclist. In addition to occurring more frequently at night, this accident type is also more prevalent on narrow, rural roads. Statistics derived from this accident type serve to reinforce the belief that is is always extremely hazardous to bicycle at night, even with recommended equipment.

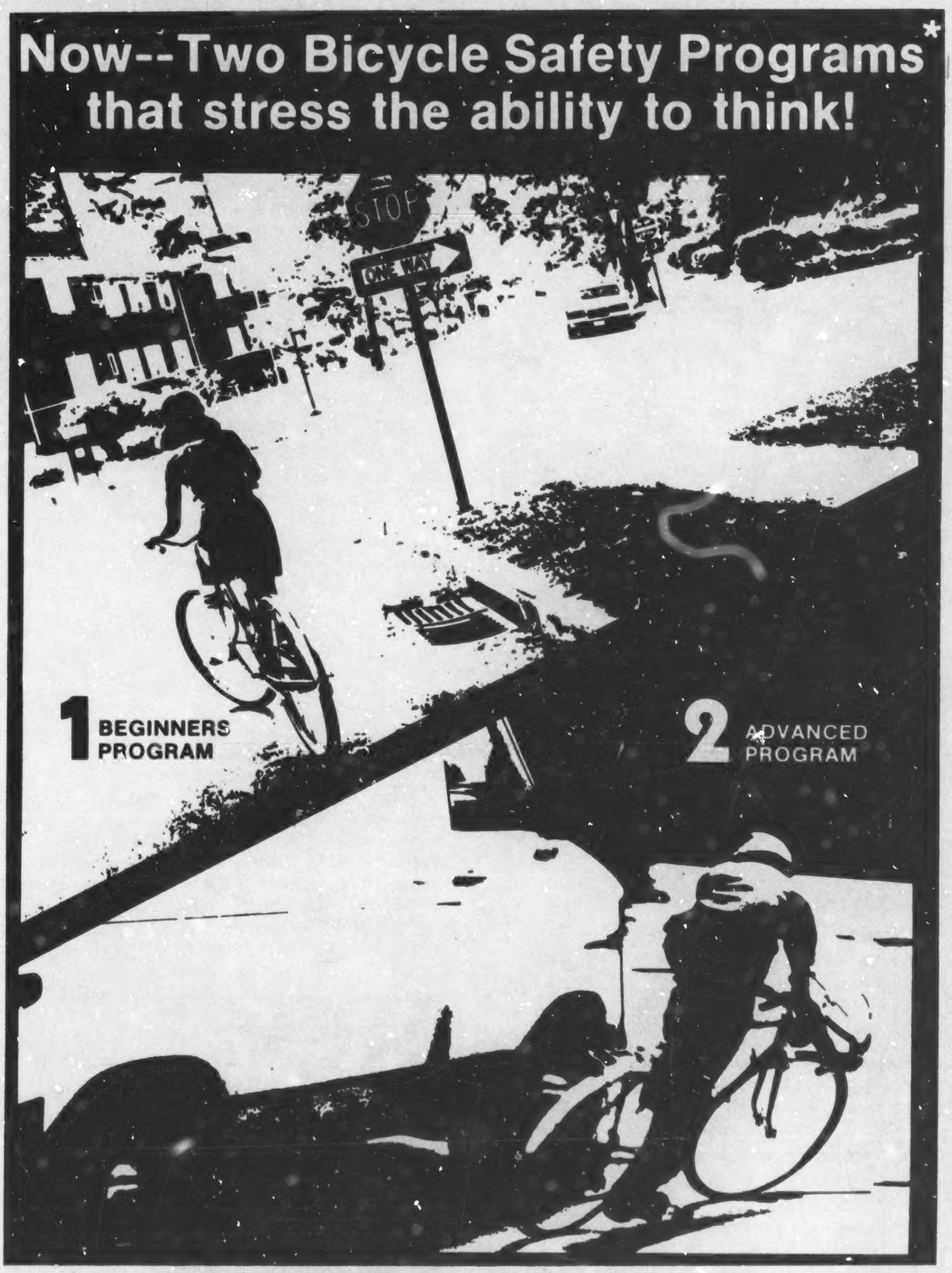
- -

In the following section, the course objectives and scope are detailed. An understanding of some of the more frequent ways in which bicycles and motor vehicles collide from a careful reading of the preceding material is an important prerequisite to a complete appreciation of the rationale behind the design of each of the lessons in the course.

EDUCATION

ATTACHMENT G

A BROCHURE DESCRIBING THE
MILNER-FENWICK TRAINING
SERIES ON HAZARD RECOGNITION
AND ACCIDENT ANALYSIS


Now--Two Bicycle Safety Programs*
that stress the ability to think!
STOP
ONE WAY
1 BEGINNERS PROGRAM
2 ADVANCED PROGRAM

BEGINNERS BICYCLE TRAINING SERIES

A complete 3-part sound/filmstrip program for grades 4-6. Total Package $200.00

Part A — Hazards in sight

Stresses defensive biking techniques along with seeing and hearing hazards.

This 3-filmstrip series is concerned with perceiving cycling hazards before trouble happens. Develops decision-making skills throughout the identify, decide and act processes. Covers a wide variety of traffic situations. Each is presented for a limited time span to simulate the actual amount of time a rider will have to react to avoid this hazard under street conditions.

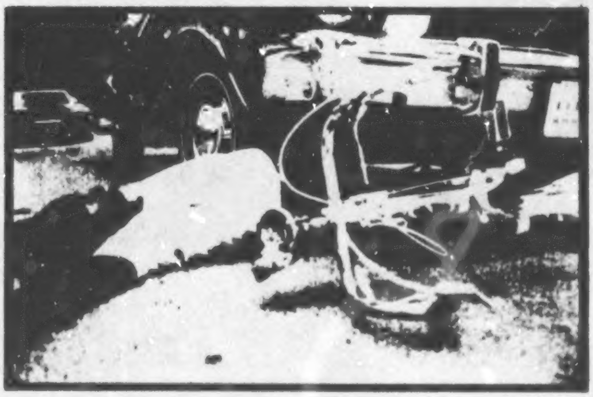
Learning to identify hazards Sound filmstrip I 88 frames (13 minutes)	$20.00
Deciding what hazard is most critical Sound filmstrip II 76 frames (13 minutes)	$20.00
Acting upon perception of hazards Sound filmstrip III 61 frames (8¾ minutes)	$20.00
Teachers Manual A 40-page book with lesson plans, evaluation and activities and frame by-frame previews of each of the three filmstrips in the "A" Program	$ 2.95
Spirit Masters Three included for follow-up activities	$ 1.00
Total	$63.95

Part B — Accident Analysis

A case history approach to bike accidents that involves students' participation.

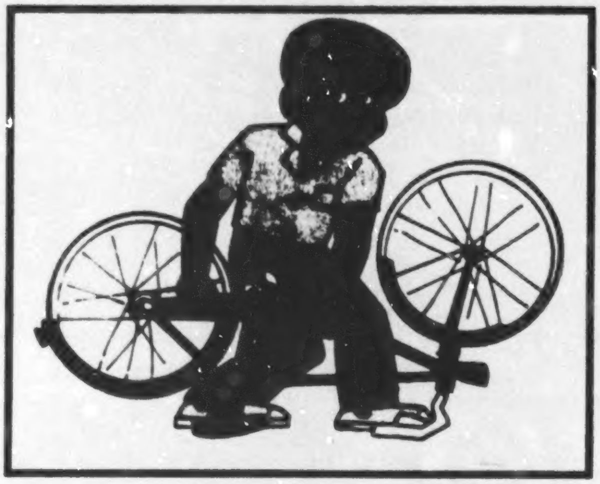
Another 3-filmstrip series designed to provoke maximum student involvement. The most common bike accidents are presented as case histories through the eyes of the biker and the other person involved. The students are then asked to decide: Who caused the accident? Were any laws broken? How could the accident have been prevented? Students are directly challenged to consider how accidents happen and how they can be prevented when they ride their own bikes.

Keeping your eyes on the road Sound filmstrip I 87 frames (12 minutes)	$20.00
Operating a safe bike Sound filmstrip II 77 frames (10 minutes)	$20.00
Avoiding hazards Sound filmstrip III 84 frames (8½ minutes)	$20.00
Teachers Manual A 44 page book which includes lesson plans, evaluation activities and frame-by-frame previews of each of the three filmstrips in the "B" Program	$ 2.95
Spirit Masters Three included for follow-up activities	$ 1.00
Total	$63.95



Part C — Owning a bike

Utilizes cartoon characters to explain selecting, operating and maintaining a bicycle.



Includes 4 filmstrips dealing with the practical side of bike ownership. One describes how you should go about selecting the correct size and type of bike. The second teaches recognition and interpretation of the many traffic signs and signals that confront the biker. The third and fourth filmstrips, (a 2-part story), illustrate the "How-to" aspect of proper bicycle maintenance. This is reinforced with a bike maintenance handbook.

So you want to buy a bike Sound filmstrip I 56 frames (6 minutes)	$20.00
Dr. Wheel's history of signs and signals Sound filmstrip II 79 frames (9 minutes)	$20.00
Keeping your bike together—Part I Sound filmstrip III 56 frames (7 minutes)	$20.00
Keeping your bike together—Part II Sound filmstrip IV 56 frames (7 minutes)	$20.00
Spirit Masters Three included for maintenance Two for Signs and Signals One for choosing the right bike	$ 3.00
Total	$83.00

JUST RELEASED!

ADVANCED BICYCLE TRAINING SERIES

A complete sound/filmstrip program for grades 7-12. Total Package $144.00.

Intro Unit (Instructor's Overview)

This unit is designed to acquaint the teacher/student with a complete overview of the advanced bicycle training program. Discusses the nature, content and actual use of the materials.
Running time - 6 min. $20.00

Unit 1 Introduction to Hazard Recognition

This unit introduces the concept that car drivers have selective perception and bike riders are not always recognized as potential hazards.
Running time - 7½ min. $20.00

Unit 2 Hazard Recognition II

This unit explains how bike riders can develop skills to recognize hazardous situations and how they can react to avoid them.
Running time - 13 min. $20.00

Unit 3 Hazard Recognition Under Stress

This unit challenges the viewers to identify various simulated hazards and how they would react to avoid them.
Running time - 11 min. $20.00

Unit 4 Scanning for Hazards Under Stress

This unit continues the stress environment concepts presented in Unit 3, but adds multiple hazards. The student must decide both what and where the most critical hazards are.
Running time - 10½ min. $20.00

Unit 5 Auditory Cues And Survival Techniques

This unit stress the importance of sound recognition in traffic, the importance of proper lane usage, as well as describing various evasive techniques.
Running time - 12 min. $20.00

Unit 6 Selecting The Best Evasive Action

This unit provides practice in selecting the best possible action to get out of potential accident situations. Extraneous sound and limited time is used to create stress and difficulty.
Running time - 12 min. $20.00

Unit 7 An Evaluation of Your Perceptive Skills

This unit attempts to provide an evaluation of the complete training program by measuring the students' ability to match potential accident situations with past experiences.
Running time - 9 min. $20.00

About the U.S. Department of Transportation Research that served as a guide for these truly relevant Milner-Fenwick Bicycle-Ed Programs.

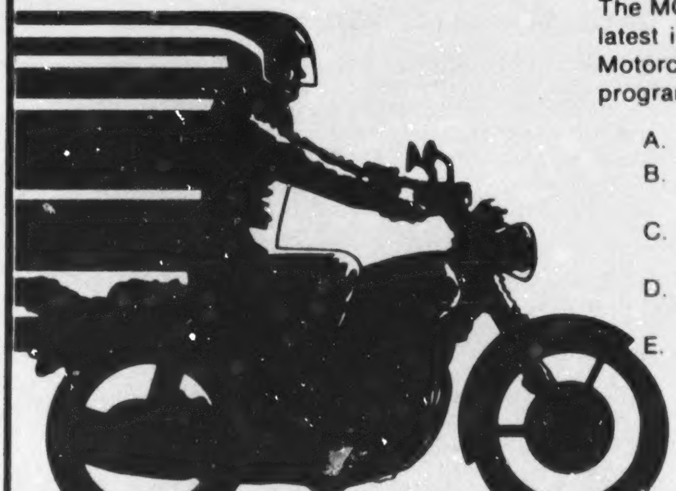
Accidents involving a bicycle and a motor-vehicle represent an important problem in most communities within the United States. Each year, since 1972, about 1,000 fatal and 40,000 injury-producing bicycle/motor-vehicle accidents are reported to the police. In addition, it is estimated that at least 40,000 injury-producing accidents go unreported each year. The property damage resulting from these accidents, while small compared to other motor-vehicle accidents, is estimated to exceed three million dollars a year.

The Study on bicycle/motor-vehicle accidents had, as its major goal, the identification of problem type or recurring accident situations, each of which is a relatively well-defined pattern of casual and descriptive factors. The most frequent accident situations were then differentiated as to age levels and the most effective educational countermeasures needed to offset the hazards. Criteria for selecting the most appropriate educational programs also were developed. Both the Beginners and Advanced Programs from Milner-Fenwick were developed with these criteria in mind.

Consultant: Donald LaFond, Coordinator of Safety Education for
Kindergarten through Grade 12; MD. Dept. of Education

Also available--The Motorcycle Safety Foundation's

MOTORCYCLE RIDER COURSE



The MOTORCYCLE RIDER COURSE (MRC) offers the latest in teaching techniques and instructional aids to Motorcycle Safety educators. The complete MRC program includes:

A. 12 fully illustrated, full color student textbooks.
B. 1 three-ring loose leaf binder Instructor's Guide with lesson plans.
C. 4 16 mm color/sound films showing actual on and off-street riding.
D. 3 color/sound filmstrips identifying parts, controls and maintenance techniques.
E. 2 permanent storage/carrying units shipped in one heavy-duty container.

HOW TO ORDER - Use the order forms enclosed or

CALL TOLL- FREE 1-800-638-8652

Milner-Fenwick, Inc., 2125 Greenspring Drive, Timonium, MD. 21093